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EVALUATING INTERNATIONAL INTELLECTUAL PROPERTY PIRACY

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BEFORE THE

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EVALUATING INTERNATIONAL INTELLECTUAL PROPERTY PIRACY

Wednesday, June 9, 2004

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, D.C.

The committee met, pursuant to notice, at 9:32 a.m. in Room SD-419, Dirksen Senate Office Building, Hon. Richard G. Lugar, chairman of the committee, presiding.

Present: Senators Lugar, Allen, Voinovich, Alexander, Coleman, Biden, Boxer, and Nelson.

OPENING STATEMENT OF HON. RICHARD G. LUGAR, U.S. SENATOR FROM INDIANA

The CHAIRMAN. This hearing of the Senate Foreign Relations Committee is called to order. It is my pleasure to welcome this morning our distinguished witnesses and our guests to this hearing, which will examine the issue of intellectual property piracy.

Our economy depends increasingly on the work of authors, artists, inventors, programmers, and many others who create intellectual products of high value. Theft of intellectual property results in competitive disadvantages to United States industries and job losses for American workers. In addition, while intellectual property is not adequately protected, the incentives to invest in innovation are reduced. As the sharing of goods and ideas transcends national boundaries, it is vital that intellectual property protections are applied on a global basis.

Existing international agreements seek to provide substantial protections for intellectual property. Under an annex to the WTO charter, known as Trade Related Aspects of Intellectual Property Rights, or the TRIPS agreement, all WTO members must provide minimum standards of protection for intellectual property rights. The TRIPS agreement also requires effective enforcement of each nation's domestic intellectual property regulations.

Two copyright treaties developed under the auspices of United Nations World Intellectual Property Organization, WIPO, are also in force. These treaties, the WIPO Copyright Treaty and the Performances and Phonographs Treaty, help raise the minimum standards of intellectual property protection around the world, particularly with respect to Internet-based delivery of copyrighted works.

Most of our trading partners have domestic laws protecting intellectual property, and many are parties to the TRIPS and WIPO agreements. Yet the existence of laws protecting intellectual property does not guarantee that piracy will not occur. Often, the intent

of statutes is undermined by lack of enforcement. Counterfeiting of copyrighted products in digital and other formats, as well as counterfeiting of all types of trademarked products, has grown to an enormous scale because these illegal activities offer a very high rate of return. Pirates can establish operations with a small capital investment, and, in many countries, they face little risk of apprehension. Even when pirates are apprehended, the penalties in some nations are too minor to continue or to constitute a deterrent.

Although intellectual property piracy occurs in numerous countries, the records of four nations are particularly troubling. Piracy is rampant in China, Russia, Brazil, and Pakistan. All of these nations are on the Administration's Special 301 Priority Watch List, which designates what countries are failing to provide intellectual property protection.

China has become a leading exporter of counterfeit and pirated goods. At the April 2004 meeting of the Joint Commission on Commerce and Trade, the Chinese Government pledged to undertake a series of actions to reduce infringement of intellectual property rights. But the piracy activities in China have continued unabated for at least the past decade, despite the seizure and destruction of millions of pirated products, often in highly publicized steamrollings of counterfeited discs.

Piracy in Russia is a growing problem. Up until the late 1990s, only a few pirate optical disc factories existed in Russia. But today, reports indicate that Russia has more than 30 such factories that churn out pirated products. This activity ruins the Russian market for American rights-holders and substantially reduces the value of other markets in Europe, as well. The Russian Government has promised to solve this problem, but meaningful results have yet to occur. Russia recognizes that its domestic laws and enforcement measures still do not meet the requirements of the TRIPS agreement.

Brazil continues to fall short in providing adequate and effective enforcement of intellectual property. Despite some positive developments, including enhancement of domestic laws, enforcement is not significantly improved. Brazil is one of the largest markets for legitimate copyrighted products, but it's also one of the world's largest pirate markets. The U.S. copyright industry estimates that losses in Brazil are the largest in the hemisphere, exceeding \$785 million in 2003.

Pakistan is a recent addition to the priority watch list. It's become one of the world's leading exporters of pirated sound recordings, motion pictures, business software, and published materials. In 2003, Pakistan was the fourth largest source of counterfeit and piratical goods seized by the U.S. Customs and Border Protection. Pakistan has taken some initial steps to improve protection of intellectual property, but these steps have fallen far short of what is required for effective enforcement.

Today we will discuss not only the problem of piracy, but potential solutions. In particular, we would like for our witnesses to give their views on how global enforcement can be improved. What enforcement methods should be utilized that are not now being employed? Would revisions to our international agreements and treaties improve enforcement? Can the United States provide willing

partners in other nations with greater assistance in enforcing intellectual property laws?

We look forward to the insights of our distinguished panel. We welcome back Jack Valenti, the President and CEO of the Motion Picture Association of America; Mitch Bainwol, the Chairman and CEO of the Recording Industry Association of America; Robert Holleyman, the President and CEO of the Business Software Alliance; and Doug Lowenstein, President of the Entertainment Software Association.

Gentlemen, we look forward to your testimony, but, for the moment, I would like to call upon the distinguished Ranking member of our committee, Senator Biden, for his opening statement.

**STATEMENT OF HON. JOSEPH R. BIDEN,
U.S. SENATOR FROM DELAWARE**

Senator BIDEN. Well, thank you very much, Mr. Chairman, for inviting us to the Jack Valenti hearing.

Hey, Jack, it's great to see you. You guys are important, but not as important as Jack. Jack, it's hard to believe they're talking about you leaving. I'm going to put you under oath and find out where you're going to be living, so I want to know where to go hang out.

Mr. Chairman, thank you very, very much for holding this hearing. And I'd like to, first of all, recognize the important list of witnesses you have here today. And in recent years, you and I have spent a lot of time studying intellectual property piracy and counterfeiting, and the issue straddles two of the major committee interests I have had in my career. One is fighting crime, and managing our relations with foreign countries—the Judiciary and the Foreign Relations Committees.

And in February of 2002, in my joint capacity back in those good old days when I was Chairman of the Subcommittee on Crime and Chairman of this committee—although if I can't be Chairman, I want you to be—we held hearings entitled the Theft of Intellectual Property, Fighting Crime Abroad and at Home, and we issued a report which some of you have seen—I may ask you a little bit about it, if I may—and on the status of this fight against what is simply, straightforwardly a crime. What I wrote in the report, and what we highlighted at the hearing, is that every day thieves steal millions of dollars of American intellectual property from its rightful owners, and it's not only an economic issue, it's a matter of diplomacy, it's a crime. It is, pure and simply, a crime.

Innovation has been the key to American economic growth throughout our entire history. And the Founding Fathers were fairly prescient and had the foresight to provide for protection of intellectual property, giving Congress the power to promote the progress of science and useful arts through such tools as copyrights and trademarks. American innovation and creativity need to be protected now more than any time in our history, in my view, no less than—no less than—our personal property, our homes, or our streets. American intellectual property is an immensely valuable resource, and failing to protect it is equivalent to letting coal be stolen from our mines, water taken from our streams and our rivers, and oil out of the ground in this country. We don't approach

it as if it were a natural resource being stolen. If, all of a sudden, the Chinese were coming over with large freighters and going into the Oregon forest and taking out hundreds of thousands of tons of timber, we'd say, "My God, what are they doing?" Well, they're doing the same thing. They're doing the same thing. They're mining on the West Coast, they're mining in this country in a way that would be no different than if, in fact, they were taking the oil out of our ground.

And last October, I joined with Senator Smith and Congressmen Goodlatte and Schiff to found the Congressional International Anti-Piracy Caucus. Now, we all know—you all have been around long enough—those caucuses don't mean much, except one thing—once we get to the point we establish a caucus, it means you've kind of broken through the ether, in terms of getting people to focus on something that heretofore has not been viewed as as consequential a problem as this is. I don't want to overstate the significance of this caucus. It has 70 members. But what we're trying to do is draw attention to the international aspects of this problem and then work with our friends overseas to stem the tide of this crime.

In the months the caucus has been in existence, we've gotten off to a good start. We've released a Watch List of five countries with piracy problems. We wrote to Secretary of Commerce Evans, Congressmen Thomas and Rangel, as well, to draw attention to the problem of piracy in China. We wrote to the governments of each of these Watch List countries to encourage actions against piracy. And we hosted counterparts, our counterparts, from Brazil, who are working to stem the tide of piracy in their countries.

I kind of equate this—you're gonna not like this—equate this to the drug trade. Those countries who, heretofore, on the drug problem—and I remember having this conversation with the President of Colombia in 1977—him saying, "Look, this is your problem. Our folks are growing the stuff, you guys are consuming the stuff, and it's really not our problem. It's not our problem." And I remember writing a report then saying, "It's going to become your problem, because you're going to become consumers. You're going to become consumers."

Well, piracy is the same way. The Brazilians are starting to figure it out. If they pirate what, in fact, we—our intellectual property, they are going to pirate the very—they're going to snuff out the possibility of being able to compete and grow internationally, and that is develop in their own countries a base of intellectual innovation that, in fact, will become the victim of the very thing we're being victimized by now. But it's a hard sell. It's a hard sell. But it's real. It's just like the drug problem, in terms of the impact on the country that is engaged in the piracy or the—let me put it this way—not fully engaged in eliminating the piracy in their own country.

Unfortunately, however, we don't have to look overseas to find that it's being stolen. That's why, in 2002, I introduced a bill to plug a hole in our federal law that permitted some counterfeiters of authentication features to go unpunished in the United States. And I thank Jack for bringing that idea to my attention. Unfortunately, the bill fell prey to a struggle between the content providers and the Internet service providers, among others, over the content.

And I have reintroduced that legislation this year, and I'm hopeful that Congress will see fit to enact an Anti-Counterfeiting Act of 2004 into the law.

America is a place where we encourage diverse ideas. And with the encouragement, we must protect those ideas. They are the source of every concept we conceive, every product we create, and all that is American culture and all that is American knowhow. We need to protect these ideas. It'll save jobs, improve the economy, fight crime, and, above all, it's just simply the right thing to do.

I would like to thank you, Mr. Chairman and our witnesses, for taking the time to be with us today, and I look forward to hearing their testimony.

The CHAIRMAN. Thank you very much, Senator Biden.

I'll ask the witnesses to testify in the order that I first mentioned them in my statement.

Let me say, at the outset, that your full statements will be made a part of the record, and so you need not ask for that to occur; it will happen. And we'll ask that you summarize your statements and proceed in the best way you can. We'll not be rigorous with regard to time constraints because we want to hear you. We want to hear the arguments that we've tried to suggest in our opening statements and in the call for the hearing.

I call now upon Mr. Jack Valenti, President and CEO of the Motion Picture Association of America, for his testimony.

Jack?

STATEMENT OF JACK VALENTI, PRESIDENT AND CEO, MOTION PICTURE ASSOCIATION OF AMERICA, WASHINGTON, D.C.

Mr. VALENTI. Thank you, Mr. Chairman.

As a reader of Churchill, I remember reading he once said that the Germans transported Lenin in a sealed train, like a plague bacillus, from Switzerland to Russia. Well, I think, in Russia, this new world called the Internet, which I think has an astonishing potential to be the greatest distribution system ever struck off by the hand and brain of man, another plague bacillus has invaded that Internet, and, I might say, terrestrial, as well. It is—in the interest of full disclosure and honest disclosure, it has to be called thievery, thievery on a scale so immense in its reach, thievery which can be the slow undoing of America's greatest trade export, and thievery which I think requires the Congress and this government to be a sleepless, formidable, and steady guardian of this asset.

Now, how big an asset is it? Let me put it to you this way. Intellectual property, which is composed of the people here at this table, exceeds more than 5 percent of the GDP of this country. We bring in more international revenues, Mr. Chairman, than agriculture, than automobiles and auto parts, and aircraft. We are creating new jobs—new jobs—not minimum-wage jobs—at three times the rate of the rest of the economy. And the movie industry alone has a surplus balance of trade—surplus balance of trade—with every single country in the world. I don't believe there's another American enterprise that can make that statement.

So that puts it on a level that we can understand. It nourishes this economy. It's an awesome engine of economic growth. And to

have it despoiled, stolen, and spirited away by other countries is just something we just can't tolerate.

Now, let me, in order to keep within this time limit, I want to focus today on two countries, China and Russia. Many other places, like Brazil and Pakistan and Thailand and Malaysia and Taiwan, also face serious problems, and both you, Mr. Chairman, and the Ranking Member, brought this out. But making progress on these, I will highlight today, I think, would make a significant difference.

Stolen films, which are usually captured by sophisticated camcorders in theaters or in special preview sites, are uploaded onto the Internet and/or find their way to these countries. In the international arena, the great majority of these crimes are in the hands of enterprising criminal organizations. Now, how much of this revenue flows to terrorists is hard to measure, but international policy forces believe it is significant.

China, I'm unhappy to say, is thick with fraudulent copies of our films. I've been to China five times in the last seven years, and I know all of you have visited there. On every street corner, in the kiosk of first-class hotels, stolen American films are sold without any intervention. China has emerged as an export center with pirate DVDs migrating their way to the U.S., as well as the U.K. and other countries around the world. At the end of April, Vice Premier Wu Yi, whom I have known for a long time, before she ascended to her Olympian status in China today—Madam Wu Yi came here and pledged to Secretary Evans and to U.S. Trade Representative Zoellick, that China would significantly reduce piracy. I think the pledge that China must keep, and my intimate knowledge—my friendship with Wu Yi tells me that she will keep that pledge. I pray that is so.

But China's got to also focus on something else, the paralyzing effect of market access restrictions that remain over the entire film community in China. Underlying this piracy problem are some of the most onerous market-access restrictions anywhere in the world. For example, there's a government monopoly on film imports, there's a 20-film limit a year. That's all we can bring into China. There's a very slow censorship process, a bottleneck on theatrical distribution, limits on the retail sale of legal home entertainment, and the restrictions on foreign investments, foreign channels, and foreign TV content. And now there's a serious new problem that has just erupted within the last several weeks that places in question China's commitment to those lower piracy rates. China has decided that major U.S. blockbuster, the big, epic films that we're ready to bring into China this summer, will not be shown in China during a key period this summer when our member companies release these blockbuster films. As everyone knows, it's impossible to fight piracy if there's no legitimate product in the marketplace.

So when audiences in China are anxious to see these blockbusters, the decision not to give playing time to these big films only benefits the pirates by guaranteeing them a monopoly on the exhibition of our works, because, I promise you, by the time those films finally get in, when the summer is over, millions and millions of copies will be already on the streets of China.

Now, in Russia, abducted films are transformed into illegal DVDs. They are matchlessly copied—I'm astonished and bewil-

dered at how good this copying is—and then exported into Eastern Europe, Central Europe, and now invading the European Union, as well as Turkey, Ukraine, Israel, Bulgaria, Estonia, Slovakia, Hungary, and Finland. It's a rising flood that seems to have no end. And although Russian enforcement authorities raided three DVD plants so far this year, and seized their production lines, frankly criminal prosecutions don't follow the raids, so there's little deterrence. Moreover, the long-awaited reform to Russia's copyright law alas, alas has been stalled in the final stages of its long legislative journey.

Brazil has been infected with huge thievery, and I'll go into some others, but I think I've probably used up my five minutes, Mr. Chairman.

The CHAIRMAN. Go right ahead.

Mr. VALENTI. All right, thank you, sir.

Good laws in Brazil are in place. What is missing? The resolve to enforce them. And these laws are, at best, vapory and sometimes nonexistent. So the ratio of convictions to raid is less than 1 percent.

The kidnapping of American creative works in most of the known world is richly rewarding. We've been told by U.S. law enforcement agencies that today if you want to really make a lot of money in illegal activity and you don't want to get shot at in gang wars, get out of the drug business and go into the intellectual property thievery business. You can make three to four times the amount of money, and you live a nice, warm life, because there's no risk to it. The rewards are great. And if you get caught, which is seldom, you get a slap on the wrist, and you go about your business. It's nirvana for criminals, and this is why it's growing and enlarging all over the world.

Now, I think the theft of movies right now is a pandemic. I want to praise the work of Ambassador Robert Zoellick. I think he and his merry band of trade representatives have done a terrific job. They're small in number, but they do herculean things. I deeply appreciate the hard work of these men and women, and particularly those serving at our embassies abroad, as well as their colleagues at the State Department and the Commerce Department.

Now, my written testimony goes into the entrails of all of this, Mr. Chairman. I hope that members of this committee and their aids will read this testimony, because I think it's very important to absorb. Because in the final end of it all, the only way we're going to deal with international piracy is with the full support and the resolve of our Congress.

Thank you, sir.

[The prepared statement of Mr. Valenti follows:]

PREPARED STATEMENT OF JACK VALENTI

THE ECONOMIC WORTH OF THE COPYRIGHT INDUSTRIES

The copyright industries are responsible for over five percent of the GDP of the nation. Over the past quarter century, these industries' share of GDP grew more than twice as fast as the remainder of the economy. They earn more international revenues than automobiles and auto parts, more than aircraft, more than agriculture. The copyright industries have been creating new jobs at three times the rate of the rest of the economy. The movie industry alone has a surplus balance of

trade with every single country in the world. No other American industry can make that statement. And all this comes at a time when the US is suffering from some \$400 billion in trade deficits.

THE SCOPE OF THE PROBLEM

The spread of theft of America's creative works flows like a swiftly running river in every nook and cranny of this planet. Today I'd like to focus on China and Russia, where the problems are large and growing at an alarming rate. In both countries, organized criminal groups play a large role in the replication and distribution of pirated DVD. And, in both countries, the piracy problems are spilling out beyond their borders to infect markets all around the world.

We also have serious piracy problems in Brazil, Pakistan, Malaysia, Taiwan and Thailand, as well as many other countries. Without a coordinated national effort to tackle the unbridled theft of American creative works, and lacking effective prosecutions and deterrent sentencing, Brazil's serious piracy problems show no signs of improving. Illegal production and export of pirated optical discs also plague Pakistan and Thailand. Malaysia, too, has a very significant production and export problem, but enforcement authorities there have been working very hard to tackle the problems, conducting impressive raids against pirate factories and pirate retail markets. Laudable efforts of Taiwan's enforcement authorities are being undermined by the lack of progress in Taiwan's Legislative Yuan in adopting urgently needed legislative reform. For a full list of our concerns, I commend to you the 2004 Special 301 Report on Global Copyright Protection and Enforcement submitted by the International Intellectual Property Alliance on February 13, 2004.¹ Nevertheless, if we were to make progress in the two countries I will highlight today, that would put a significant dent in global piracy.

Stolen films, usually captured by sophisticated camcorders in theaters, or in special preview screenings, are uploaded to the Internet and are available for individuals to download in any country around the world. At last month's Cannes Film Festival, representatives of cinema studios, production houses, infrastructure providers and film directors from the United States, Europe, India, China, and Russia gathered under the auspices of French Minister of Culture and Communication Renaud Donnedieu de Vabres and President of the Cannes Film Festival Gilles Jacob to call for the launch of strong, urgent and coordinated action to fight the scourge of piracy. The participants underlined in particular the threat that the free downloading of protected works through Internet peer-to-peer systems represents to the world's creators. Taiwan and Korea are two countries with high levels of internet access and rapidly growing internet piracy; neither have fully updated their legal infrastructure to address the growing problems.

Camcordered copies of our films also find their way to the pirate DVD production centers, including China, Russia, Malaysia, Thailand and Pakistan, where they are used as the master copies in the illegal replication plants.

In the international arena, international trade in pirated optical discs is in the hands of enterprising criminal organizations. According to Ron Noble, the international police network's secretary general at the first Global Congress on Combating Counterfeiting in Brussels last month, "Interpol believes there is a significant link between counterfeiting and terrorism in locations where there are entrenched terrorist groups." How much of the revenues flow to terrorists is hard to measure, but doubtless it is there.

CHINA

For a decade, American film companies have engaged in a concerted effort to penetrate the Chinese entertainment market. Despite a pair of trade agreements, strong support from the US Government, steady investments in relationships and projects, and a continual dialogue with Chinese authorities, the predicament of American filmed entertainment industry in China is grim. Piracy has reached a level not seen since 1995, and market access barriers continue to thwart efforts to deliver legitimate film and home entertainment programming to Chinese audiences.

Chinese policy has continued to lag far behind what has been promised by authorities. Earnings by MPAA member companies in China from theatrical distribution have fallen; in 1998, the average US film distributed to Chinese cinemas on a revenue-sharing basis earned \$1.9 million for the member company, but by 2002 that amount had fallen to \$500,000, and per company earnings for American filmmakers fell by 20% during the period.

¹(An electronic version of IIPA's Special 301 report is available at http://www.iipa.com/special301_TOCs/2004_SPEC301_TOC.html.)

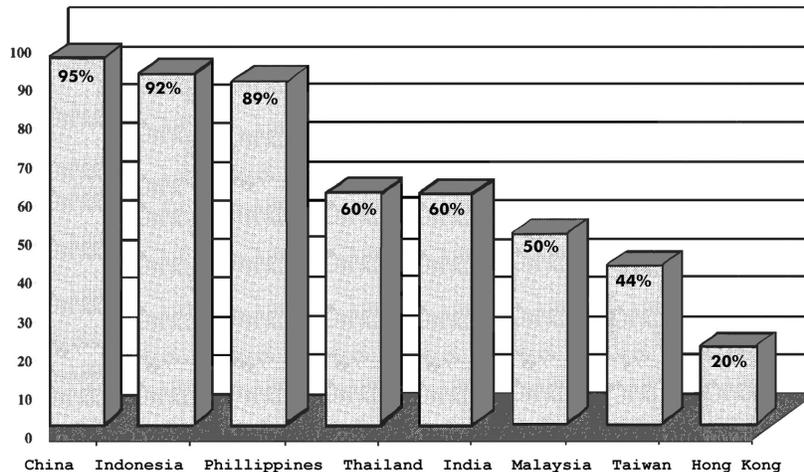
Formal market access barriers remain in place, including a government monopoly on film importation, quantitative limits on imports, a slow and cumbersome censorship process, a theatrical distribution duopoly, limits on the retail sale of legal home entertainment, and restrictions on foreign investment, foreign channel carriage, and programming content in the television sector. Ironically, these restrictions further tilt the market environment in favor of pirates, who obey none of the government's regulations, while reaping at least 95% of the market's sales.

Making a bad situation even worse, word leaked in late May that major U.S. blockbusters would not be given screen time in China during a key period when MPA member companies release their summer blockbusters to cinemas in the United States and the world. Several of our member companies had been working diligently to ensure that Chinese consumers were able to enjoy these films in cinemas at the same time as the rest of the global audience.

If audiences do not have the option of going to see a legitimate film in the cinemas, illegal home video product will flow in to fill the demand. By discouraging consumers from seeking their entertainment at the cinema, this decision damages the revenue streams of China's cinemas and diminishes the value of the both local and U.S. investments in new multiplexes in China. Only the criminal elements behind piracy will benefit from this decision while legitimate businesses are deprived of success.

Meanwhile, piracy problems are only becoming more severe. In 2002, the piracy rate in China for American films, home video and television) was about 91%. In 2003, the pirates captured at least 95% of that market. The current level of piracy is worse than it has been at any time since 1995, when the rate was 100%. In fact, China leads the Asian region in piracy; the rate of piracy in China is higher than that of other countries that traditionally have been plagued by piracy, including Malaysia, Indonesia, India, and the Philippines, as illustrated on the following chart.

Asia Pacific Region: Piracy Rates and Losses



China is again becoming a source of pirate discs circulating in world markets—just as it was in 1995. For example, during the first three quarters of 2003, customs officials in the United Kingdom saw an alarming escalation in seizures of pirated DVDs originating from China. During the first quarter, UK Customs officials seized fewer than 1,300 pirated discs from China—but in the following three quarters, seizures jumped to a combined total of over 94,000. As of April 30, 2004, UK Customs seized 78,666 pirated disc from China compared with 1,238 pirated discs seized during the same period of year 2003 (a rapid increase of 6,254%). Despite the seizure in China of 34 optical disc production lines and two mastering lines in 2003, source piracy has still received insufficient attention from Chinese authorities to deal with the rapidly increasing export problem.

Domestically, rampant piracy continues to fill the void created by slow and limited access to the legitimate market. Far less legal filmed entertainment is entering China than the market demands. Restrictions on access and bureaucratic obstacles to distribution in the theatrical, home entertainment and television marketplace

provide a vacuum that is readily filled by pirates, who ignore time-consuming bureaucratic obstacles like censorship procedures and pay no taxes.

While DVD piracy has been crippling to foreign films, this rampant piracy is equally devastating for the local Chinese film industry. Many Chinese studios are on the verge of collapse. No supplier of legal films, local or foreign, can compete with pirates who pay no taxes, endure no censorship obligations, and who carry none of the costs of running a studio and paying actors and actresses.

Television piracy is also a major concern. The government runs 38 provincial broadcast television stations and 368 local stations, which commonly broadcast unauthorized content, often in reliance on counterfeit "letters of authorization" or "licenses" from companies in Hong Kong, Thailand or Taiwan, which purport to convey broadcast rights. In addition, the more than 1,500 registered cable operators in China routinely include pirated product in their program schedules.

Actions Needed

In order to curtail the excessive levels of piracy in China, China must take the following steps:

- Strengthen focus, coordination and effectiveness of the various Chinese enforcement agencies through strong direction from the top Chinese leadership.
- Build consumer awareness of the dangers and penalties of engaging in piracy.
- Establish credible legal deterrents to piracy to include the lowering of the criminal threshold for copyright violations.
- Create strong, well-coordinated local enforcement entities such as that in Shanghai.
- Sharp improvement in the transparency regarding enforcement raids, criminal case proceedings and court sentencing results.
- Set a fixed timetable for bringing piracy rates steadily down from current levels exceeding 95%. An immediate goal should be to bring piracy below 50% by the end of 2004.
- Take immediate action to stop the rising volume of pirate exports from China.
- Take concrete steps to improve market access and eliminate obstacles to distribution in the theatrical, home video and television markets.

China is slowly enunciating policy goals that provide some room for cautious optimism that these items may be addressed. In April 2004, at the conclusion of the U.S.–China Joint Commission on Commerce and Trade, Chinese Vice Premier Wu Yi specifically committed to reduce rates of piracy. She also pledged to lower the criminal threshold for piracy and to increase the number of infringing acts subject to criminal penalties by the end of the year. These criminal law commitments are important in correcting some of the biggest structural impediments to criminal prosecutions and deterrent sentencing for IP crimes in China. China also indicated that they would be conducting a nationwide enforcement campaign, stepping up border enforcement and launching a public education campaign. Finally, China will adopt and implement the WIPO Internet treaties.

RUSSIA

Background

There has been an explosion of large-scale factory production of pirate DVDs in Russia over the past few years. The export of pirate DVDs to both developed and growing markets across Europe has eviscerated any progress that had been made in Russia towards the creation of a healthy legitimate audiovisual market. The known local DVD plants have an estimated annual production capacity of over 30 million DVDs, well over ten times the level of legitimate local demand. These discs are clearly being made for export to markets across Europe, carrying multiple language tracks and subtitles. Moreover, the local Russian market is saturated with pirate DVDs, with the level of piracy estimated at 92% in 2003. Sales of legitimate DVDs have fallen back to 1999 levels despite a significant increase in the number of households with DVD players, and despite efforts by foreign producers to move legitimate product into the Russian market much earlier than in prior years. In 2002, we reported the seizure of over 226,000 pirate DVDs in raids on warehouses and outlets across Russia. That number jumped in 2003 to over 1.4 million.

Laws and Enforcement

Russia's laws remain TRIPs incompatible and effective anti-piracy action by law enforcement agencies is substantially deficient. Russia has yet to effectively enforce the laws it has in place at a level necessary to have any appreciable effect on piracy.

On-the-ground enforcement by police and prosecutors remains lacking. As a result, Russia has some of the highest rates of copyright infringement in the world.

Russia has made progress recently in improving its intellectual property protection regime. The Government has recognized the seriousness of the piracy problem, legislative reforms have been adopted and enforcement efforts have been increased. In recent months *ex officio* enforcement actions began to be conducted almost daily and have been widely reported by local media. Three pirate DVD plants have been raided so far this year and have had their DVD lines seized. Moreover, Russian officials recognize the importance of improving IP protection in the context of accession to the WTO. However, despite the efforts to date of the Russian Government, pirate production and export continue to grow unabated. The organized criminal groups that control most of the manufacture and distribution of pirate product continue to grow in wealth, strength and influence. Piracy is acknowledged by everyone to be one of the most profitable criminal businesses in Russia. Much more needs to be done on an urgent basis to have even a nominal impact on this problem.

The criminal groups running piracy operations are well-funded and highly organized. Such groups cannot be effectively opposed by rightsholders alone or by local organizations acting on their behalf, regardless of the dedication, bravery or expertise of their personnel. The committed help of the Russian Government is required to face down such criminal syndicates. The only way to combat the syndicates is by effective criminal enforcement. Unfortunately, Russia's criminal enforcement system is the weakest link in its intellectual property protection regime. Raids are not followed up by criminal prosecutions. Prosecutors drop cases for no reason, or cite a lack of public interest. When cases are prosecuted, the penalties imposed are not at deterrent levels. Prison sentences are usually suspended. There have been welcome exceptions, of course, but police and prosecutors are generally discouraged by their experiences from investigating and prosecuting more offenders.

Another problem that needs urgent Russian Government attention is the unacceptable return to the marketplace of confiscated pirate product. It is estimated that up to three quarters of the pirate product seized in raids finds its way back onto the market.

Actions Needed

To put into effect its stated commitments to tackle its piracy crisis, the Russian Government should take the following steps:

- Inspect, on a regular, unannounced and continuous basis, each of the known optical disc plants, and immediately close down any plant and seize any machinery found to be used to produce pirate product or operating without a license;
- Introduce, either via executive order or legislation, the necessary modifications of the current optical disc licensing regime so that it provides for more effective control over the operations of plants, including stricter controls on the importation of polycarbonate and machinery, mandatory seizure and destruction of machinery used to produce pirate materials, and the introduction of criminal penalties for the owners of such plants;
- Pledge to investigate all complaints from copyright owners in respect of the commercial replication, distribution or export of pirate optical discs;
- Act through Customs to prevent the continued export of pirate discs to other countries;
- Pass the long-awaited amendments to the Copyright Law and ensure full consistency with international standards as set out in the WIPO Internet Treaties and the WTO TRIPs Agreement; and
- Adopt a decree setting forth sentencing guidelines for judges to advise the Courts to impose penal sanctions as provided under the penal code as amended (Article 146).

OTHER COUNTRIES WITH SIGNIFICANT PIRACY PROBLEMS

Brazil

Brazil, our most important South American market, is beset with piracy. One out of every three tapes or DVDs is pirate. Our member companies lose an estimated \$120 million every year in Brazil to piracy. Street market sales of locally "burned" recordable DVDs (DVD-Rs) and low quality recordable CDs (CD-Rs) are ubiquitous and internet sales of pirated optical discs are also increasing rapidly. While Brazil has good copyright laws, their enforcement is abysmal. Even in those jurisdictions where police have conducted raids, criminal prosecutions are rare, and deterrent

sentences even less common. Less than 1% of all raids result in convictions, and even those few sentences are so light that future crimes are not deterred.

A special Brazilian Congressional Investigation Commission on Piracy and Contraband provides one bright spot in an otherwise dismal piracy situation in Brazil. Since June of last year, this Commission made extraordinary efforts to investigate and attack piracy. They exposed a major criminal organization led by a naturalized Brazilian of Chinese nationality, Lao Kin Chong. Chong, who produces contraband optical discs for the Brazilian market and sells them in three large commercial shopping centers, was finally arrested last week after trying to bribe the head of the Congressional Commission. The Commission also investigated and arrested public agents for corruption, demonstrating that the reach that organized crime of piracy can have with official organizations. They encouraged private authorities to carry out search-and-seizure operations against commercial outlets known for pirated material, which triggered an increase in the number of operations by police and administrative authorities. The Commission welcomed the participation of the private sector in supporting the fight against piracy.

The Parliamentary Inquiry Committee is scheduled at the end of June to submit its final report to the Lula Administration for strengthening the national system for combating piracy. In their dual role as members of the Parliamentary Front to Combat Piracy, a permanent body that enjoys the participation of the private sector, these Brazilian legislators will play a key role in pressing their Government to ensure that the proposals of the Parliamentary Inquiry Committee are effectively implemented.

We hope that the U.S. Government will also engage the Government of Brazil in serious effort to secure more effective protection of filmed entertainment and other copyrighted works, using all appropriate trade tools, including through negotiation of high IP enforcement standards in trade agreements and by utilizing the leverage provided by preferential tariff programs such as the Generalized System of Preferences. The Administration is facing a decision shortly with regard to a petition filed by the International Intellectual Property Alliance, which proposes that the United States withdraw Brazil's GSP eligibility for failure to provide adequate and effective protection of intellectual property.

Malaysia

Malaysian enforcement authorities have shown remarkable courage and tenacity in actions against unlicensed optical disc factories and street markets retailing pirate DVDs. Continued vigilance, including of the licensed factories, will be necessary to reduce pirate production. Malaysia also made a significant dent in the export of pirated DVDs by means of express delivery services. Malaysia's next major challenge on the route to ridding itself of the scourge of organized, criminal optical piracy will be the successful prosecution and sentencing at deterrent levels of guilty parties.

Pakistan

Pakistan has become a major producer and exporter of optical discs as shown by the increasingly large seizures of pirate product by customs services in Europe and Africa. Pakistan has at least eight active plants with 25 lines, including one DVD plant.

Pakistan is now the leading source of pirated DVDs seized by UK Customs. In the first quarter of this year, UK Customs intercepted over 94,000 pirate DVDs pirate discs that originated in Pakistan. To circumvent the Customs controls in the UK the pirates have been seeking to exploit perceived weak points in the European Union's common external border. So far this year pirate shipments from Pakistan have been detected at EU entry points in France, Netherlands, Spain, and Belgium, in addition to the UK. With the accession of 10 new countries to the EU last month, our fear is that this trend will continue. South African Customs has also intercepted several large shipments of pirated DVDs originating in Pakistan; which were transiting that country and heading for other markets in Africa.

Taiwan

The story in Taiwan is mixed. Large-scale factory production of pirated DVDs is largely a problem of the past in Taiwan. The organized criminal piracy organizations switched to production of blank recordable discs, a legal product, but one that provides the raw material for illegal commercial "burning" (copying) of our home entertainment in smaller, more dispersed labs in Taiwan and throughout the world. Taiwan's enforcement officials recently conducted a raid against a major "burning" lab and have also helped reduce the overt retail sales of pirated goods in street markets. Unfortunately, no progress has been made in the long awaited legislative reforms. Taiwan needs to ensure that its enforcement officials have all the legal tools

necessary to continue their enforcement against hard goods piracy and to successfully tackle on-line theft. Instead of moving forward with these amendments, Taiwan is flirting with adoption of a compulsory license on internet transmission of sound recordings, a step that would be inconsistent with Taiwan's TRIPS obligations and set an unacceptable international precedent.

Thailand

Thailand remains one of the few major optical disc production centers in Asia that has failed to adopt effective optical disc regulations to stem the growing production problems. Unless Thailand significantly steps up its fight against the large factories that are churning out pirated copies of DVDs, MPAA will not be able to support the Free Trade Agreement, which our countries are preparing to negotiate.

CONCLUSION

What we often refer to as "piracy" is more clearly and accurately defined as "outright thievery." It is thievery that our country cannot afford to tolerate.

I thank you, Mr. Chairman, and members of the committee, for your interest and your assistance in helping us illuminate this dark corner of illegal commerce.

The CHAIRMAN. Well, thank you very much, Mr. Valenti. I'd like to call now on Mr. Mitch Bainwol, Chairman and CEO of the Recording Industry Association of America.

Mr. Bainwol?

STATEMENT OF MITCH BAINWOL, CHAIRMAN AND CEO, RECORDING INDUSTRY ASSOCIATION OF AMERICA, WASHINGTON, D.C.

Mr. BAINWOL. Thank you.

Chairman Lugar, Ranking Member Biden, members of the committee, I'm Mitch Bainwol of the RIAA. Our members create, manufacture, and distribute 90 percent of the music in this country.

American music dominates the globe, with fans in every language, in every culture, in every corner of the world. I'm also proud to be part of Jack's backup band. Thank you, Jack.

As America pays tribute to the life of Ronald Reagan, George Will's Sunday column noted the former President's words in Moscow, where he said, "Mankind was emerging from the economy of muscle and entering the economy of mind." His description was typically elegant and instructive.

America's future is, in fact, rooted in the economy of mind. Our comparative strength globally increasingly is derived from the products of our imagination—music, movies, software, and games—all represented before you today. As you well know, piracy plagues each of our industries, but, from my industry, music, the proportion of impact of piracy is perhaps most severe. The story of music piracy, thus, presents a wake-up call for all policymakers who believe that America's engines of imagination are worthy of defense.

Our story, succinctly, is this. Music sales quadrupled during the 1980s and the 1990s, to about \$40 billion globally, but hit a wall in 1999. Sales tumbled by about a third, compromising thousands of jobs and resulting in significant reductions in artist rosters.

Prior to 2000, piracy abroad was dramatically worse than it was here in the United States. Still, the music industry was able to prosper. That piracy gap still exists, but is closing. As we've seen international piracy accelerate, domestic piracy has spiraled out of control. Why? There are two key triggers. First, the enormous wave of illegal file-sharing and so-called P-to-P networks, conditions tied to America's superior broadband penetration, and, second, the

widespread proliferation of CD burners, making it easy and inexpensive to produce high-quality recordings.

But technology is not the problem. There will always be ways to steal. The relevant question, therefore, is whether our society chooses to value products of the mind, as Reagan noted, equivalently with products of muscle. For if we don't respect IP here in the United States, we both undercut the vibrancy of our comparative strength in a global marketplace, and, necessarily, we jeopardize our moral authority to demand that foreign countries take IP seriously, and seriously they must. Worldwide pirated sales of music total about two billion units—two billion units. Two in five units abroad are pirated. Optical-disc manufacturing has quadrupled to about 50 billion units, far exceeding legitimate demand. And those same triggers that deepened our domestic challenge are taking hold abroad.

Along with MPAA, BSA, and ESA, we belong to the International Intellectual Property Alliance, IIPA. In its recent 301 recommendations to USTR, we identified copyright protection and enforcement problems in 56 countries across the globe. But, as you noted, Mr. Chairman, four countries stand out. And I just want to take you on a very, very quick tour and touch on these.

In Russia, record-industry losses in '03 totaled about \$400 million with a piracy rate of 64 percent. Russia dubiously leads the world in the export of pirate CDs. Piracy there is a growth business. The number of CD plants has more than doubled in the last three years. Production capacity has more than tripled. Eight of the 34 known plants are on military facilities. Russian manufacturing capacity now stands at 342 million CDs and 28 million DVDs, even as the legitimate market represents only about 10 percent of that production. Russia's anti-piracy efforts are severely hampered by flawed legislation, ineffective enforcement, and inadequate deterrents.

If, by the end of this month, the Russian Government is not meeting the benchmarks outlined in my written testimony, the President should determine that Russia does not provide adequate and effective IP protection, and, thus, fails to meet the standards for receiving duty-free GSP benefits.

In China, record-industry losses in 2003 were about \$300 million, with a physical market that is, at 90 percent, almost entirely pirate. Internet piracy is soaring, with 70 million Chinese online. Unlike the Russians, the Chinese have taken significant steps to disrupt the export of pirate products, but they have not adequately tackled the IP problems within their borders. Moreover, the Chinese present, as Mr. Valenti attested to, a series of disruptive market access and investment barriers. Given these challenges, we were heartened to see April's announcement with the Chinese, and we call up on China to cut its piracy levels in half by the end of this year.

Brazil used to be a profitable and vibrant nation for U.S. sales. It's collapsed. Record-industry losses in 2003 totaled about \$350 million, with a piracy rate of over 50 percent. Its greatest deficiency is criminal enforcement. Over the last six years, fewer than 1 percent of the raids generated convictions. When they did, judgments were inadequate.

The Brazilian Congress recently established a parliamentary inquiry on piracy, members of which recently visited Washington. They committed themselves to a joint declaration, as Mr. Biden suggested. But they have a long way to go. As in the case of Russia, unless Brazil takes the steps outlined in my written testimony, President Bush should determine that Brazil fails, also, to meet the standards for receiving GSP benefits.

Finally, Pakistan. Unfortunately, Pakistan reflects the export problems of Russia and the domestic challenges of China. Record-industry losses in 2003 were about 70 million, with 100 percent piracy rate. Eight known facilities in Pakistan produced upward of 180 million CDs in 2003, of which 160 million were exported to at least 46 nations all around the globe. The government of Pakistan has taken only cosmetic steps to curtail production and export of pirated product. Accordingly, the U.S. Government should accept the IIPA 2001 petition to remove preferential trade benefits—tariff benefits for that country, and commence the appropriate investigation.

Let me try to summarize. While defensive IP is weak, dreadfully weak in dozens of countries across the globe, these four nations represent the most salient piece of the piracy puzzle, and they warrant special attention. So we appreciate the hearing today.

At the same time, as we seek to address piracy abroad, we need to do more to get our own house in order. The domestic music industry is struggling. We cannot endure the twin cancers of rising piracy abroad and society indifference to IP in the United States.

In sum, to move forward I would suggest the following. One, determine that Brazil and Russia fail to meet the standards for receiving GSP benefits unless immediate steps are taken. Two, hold the Chinese accountable for the 50 percent improvement in piracy rates. Three, advance a GSP petition, vis-a-vis, Pakistan. Four, provide USTR in Commerce in particular, and other agencies providing support, like, Senator Allen in your initiative with the State Department, with the resources necessary to advance our distinctly American economy of the mind. And, five, vigorously defend the rights of content-holders here in the United States as a core and unassailable foundation of our domestic commitment to our own comparative strength.

And, with that, I will close, and thank you, members of the committee.

[The prepared statement of Mr. Bainwol follows:]

PREPARED STATEMENT OF MITCH BAINWOL

Mr. Chairman and members of the committee, on behalf of the Recording Industry Association of America, I appreciate the opportunity to testify today about international intellectual property piracy.

I am Chairman and CEO of the Recording Industry Association of America (RIAA), the trade group that represents the U.S. recording industry. RIAA's mission is to foster a business and legal climate that supports and promotes our members' creative and financial vitality. Our members are the record companies that comprise the most vibrant national music industry in the world. RIAA members create, manufacture and/or distribute approximately 90% of all legitimate sound recordings produced and sold in the United States.

Music is the world's universal form of communication. It touches every person of every culture on the globe to the tune of \$32 billion annually, and the U.S. recording industry accounts for more than one-third of that world market. Our members cre-

ate employment for thousands of people, including singers, musicians, producers, sound engineers, record promoters and retail salespersons, to name only a few.

THE IMPORTANCE OF THE U.S. RECORDING INDUSTRY, AND INTELLECTUAL PROPERTY PROTECTION, TO THE U.S. ECONOMY

International markets are vital to our companies and our creative talent. Exports and other foreign sales account for over fifty percent of the revenues of the U.S. record industry. This strong export base sustains American jobs.

The protection of our intellectual property rights abroad is vital to promoting America's competitive advantages in world commerce. As our trade deficit has soared, we call upon Congress to consider more closely the relationship between our widening trade and current account deficits and copyright piracy and to take steps to enable us to more effectively protect our intellectual property rights at home and abroad.

An important part of our nation's competitive strength lies in the creation of knowledge-intensive intellectual property-based goods and services. This is one of those economic activities that Americans do better than the people of any other nation. The "core" U.S. copyright industries account for more than five per cent of U.S. GDP. Employment in our industries has doubled over the past 20 years, growing three times as fast as the annual growth rate of the U.S. economy as whole. The foreign sales and exports of U.S. copyright industries were nearly \$90 billion in 2001, an amount greater than almost any other industry sector, including automobiles and auto parts, agriculture and aircraft.

The intellectual property of the United States is like a warehouse of ideas and creativity. For people to walk in and steal them is no more tolerable than theft of physical goods. And the sale of our recordings abroad makes a major contribution to America's current account balances. Each and every sale of a pirated product abroad that substitutes for the sale of a legitimate American product increases our current account deficit. As a result, Americans employed in competitive industries like ours are denied financial benefits that should have occurred but did not.

THE EFFECT OF MUSIC PIRACY

The piracy of music is almost as old as the music industry itself, but historically it was difficult for the criminal to reproduce copies as good as the real thing. Now with the advent of digital recordings, criminals can reproduce near perfect copies of any recording. There is massive manufacture and traffic of illegal CDs, both in the form of molded CDs that are produced in large plants, and CD-R's produced with blank optical discs and readily available computer CD-R burners

Annual world-wide pirate sales approach 2 billion units; worth an estimated \$4-\$5 billion. Globally, 2 in 5 recordings are pirate copies. Total optical disc manufacturing capacity (video/audio CDs, CD-ROMs and DVD)—stands at 45 billion units, having quadrupled in the past five years and greatly exceeds legitimate demand. This creates a business environment ripe for exploitation by criminal syndicates and even international terrorist groups, at times shielded by governments hostile to our interests. Given that the pirate producer has few or none of the overheads associated with genuine production, the profit margin is substantial.

The battle against intellectual property theft must be unrelenting. Digital technology and internet piracy have greatly exacerbated our problems. High levels of piracy, in conjunction with market access barriers in certain countries plague our industry. Our country must employ every tool at its disposal, including the critically important leverage provided by international trade agreements. This is why your hearing today is so critical to us.

RIAA belongs, along with MPAA, BSA and ESA, to a copyright-based umbrella organization called the International Intellectual Property Alliance. In its recent Special 301 recommendations to USTR, IIPA identified serious copyright protection and/or enforcement problems in 56 countries. We face major piracy problems in such countries as Mexico, Paraguay, Thailand, Malaysia, Taiwan and Ukraine. But four countries—Russia, China, Brazil and Pakistan—stand out. My testimony today focuses on these nations.

RUSSIA

Russia's copyright piracy problem is enormous. The performance of the Russian government over the past decade can be summed up as representing a legacy of failed commitments of obligations to the United States and the broader international community.

The record industry lost \$405 million and suffered a 64% piracy rate in 2003. Russia is the world's largest exporter of pirate CD's. This production has devastated the

domestic Russian market, and exports of pirated Russian CDs are causing serious damage to the legitimate market for recorded music worldwide. Russian pirated CDs have been found in more than 26 countries. Russia's criminal enforcement system has failed to stem persistent commercial piracy. Overall copyright industry losses have well exceeded \$6 billion for the past seven years.

The number of CD plants in Russia has more than doubled in the last three years to 34 known to us. Production capacity has nearly tripled as criminal operations have encountered little hindrance in expanding their activities. Even more troubling, eight production plants are located on the facilities of Russian military-industrial enterprises. Russia's annual manufacturing capacity now stands at 342 million CDs and 28 million DVDs, despite the fact that only 30 million legitimate music CDs were sold in Russia in 2003.

Russia's anti-piracy efforts are severely hampered by flawed legislation, ineffective enforcement by the Russian authorities and insufficient deterrent penalties in the courts.

In order to address these problems effectively and in a timely manner, we propose a series of benchmarks for Russian Government to meet. We advocate that failure by Russia to show substantial progress on these issues by July 1, 2004 should result in the immediate suspension of Russia's preferential duty-free "GSP" benefits on their products imported into the United States. The Administration's July 1 decisions on Russia and other GSP cases are fast approaching. In addition, we commend the U.S. Administration for conditioning Russia's accession to the World Trade Organization on full compliance of its copyright regime, both from a legislative and enforcement standpoint, with the WTO TRIPS obligations. It is imperative that the Administration continue to do so.

We propose the following benchmarks. Russia should:

1. Immediately commence inspections, on a regular, unannounced and continuous basis, each of the 34 known optical disc plants, and immediately close down any plant and seize any machinery found to be used to produce pirate product or operating without a license;
2. Adopt a decree setting forth sentencing guidelines for judges-advising the Courts to impose penal sanctions as provided under the penal code as amended (Article 146);
3. Pledge to investigate all complaints from copyright owners in respect of the commercial replication, distribution or export of pirate optical discs;
4. Introduce, either via executive order or legislation, the necessary modifications of the optical disc licensing regime so that it provides for more effective control over the operations of the plants, including stricter controls on the importation of polycarbonate and machinery, mandatory seizure and destruction of machinery used to produce pirate materials, and the introduction of criminal penalties for the owners of such plants;
5. Announce, from the Office of the President, that fighting copyright piracy is a top priority for the country and particularly for Russia's law enforcement agencies and the General Procurator's Office, which fighting piracy must be priority task. The Office of the President should also instruct the Inter-Ministerial Commission, headed by the Prime Minister, to deliver reports every three months to the President on what steps have been taken to address the problem; and
6. Sign into law the copyright law amendments that have already had their third reading in the Duma.

These steps, if taken, should provide a sufficient basis for maintaining Russian participation in the GSP program. They will not, however, resolve the situation, and progress towards more completely addressing the range of continuing problems—both legal and enforcement related, must be closely monitored. Russia's anti-piracy efforts remain severely hampered by flawed legislation, ineffective enforcement by the Russian authorities and insufficient deterrent penalties in the courts. We are hopeful that Russia will meet the benchmarks set forth above. In the longer term, the Russian government will need to address legal reforms in the copyright law (even after the adoption of the current amendments), the criminal code, the criminal procedure code, and the administrative code, as well as to press for stronger and more effective enforcement compatible with WTO TRIPS and the WIPO digital treaties.

CHINA

RIAA has a long history of active involvement in intellectual property negotiations between the United States and China. We participated in negotiations led by the Office of the U.S. Trade Representative in 1995 and 1996 undertaken pursuant to Section 301 investigations, resulting in exchanges of letters obligating China to close factories producing and exporting pirate CDs that were causing catastrophic disruption of our global markets. While the Chinese government did indeed successfully disrupt the exportation of pirate products, it has not yet seriously tackled the problem of piracy within its borders, an obligation that was undertaken in these bilateral agreements, as well as in their World Trade Organization (WTO) commitments.

Last year, despite China's various bilateral and multilateral commitments to the United States, the record industry lost \$286 million and suffered a 90% piracy rate in China. We face three significant and related problems there:

1. The Chinese internal market remains almost entirely pirate (at over 90%) despite many raids, seizures and administrative fines that clearly have been inadequate to deter continued piracy.
2. Internet piracy is growing rapidly in China. Many websites offer downloading of pirated music files, some for a financial charge, others for free. At any moment in time, approximately 70 million Chinese citizens are online—a huge number.
3. A series of market access and investment barriers prevent our members from serving the Chinese market in a timely manner, which perversely only increases consumer demand for pirated product.

China's Recent Commitments

On April 21, China made a series of commitments to the United States via a meeting of the U.S.–China Joint Commission on Commerce and Trade. China promised to:

- Significantly reduce IPR infringement levels.
- Increase penalties for IPR violations by taking the following actions by the end of 2004:
 - Subject a greater range of IPR violations to criminal investigation and criminal penalties.
 - Apply criminal sanctions to the import, export, storage and distribution of pirated and counterfeited products.
 - Apply criminal sanctions to on-line piracy.
- Crack down on violators by:
 - Conducting nation-wide enforcement actions, city-by-city, against piracy and counterfeiting, stopping the production, sale and trade of infringing products, and punishing violators.
 - Increasing customs enforcement action against the import and export of infringing products and making it easier for rights-holders to secure effective enforcement at the border.
- Improve protection of electronic data by ratifying and implementing the World Intellectual Property Organization (WIPO) Internet Treaties as soon as possible.
- Launch a national campaign to educate its citizens about the importance of IPR protection. The campaign will include press events, seminars and outreach through television and print media.
- Establish an intellectual property rights working group under the JCCT. Under this working group, U.S. and Chinese trade, judicial and law enforcement authorities will consult and cooperate on the full range of issues described in China's IPR action plan.

China has committed to tangible, specific steps to address the rampant piracy of copyrighted works. If fully implemented, this will be a landmark announcement and a real victory for composers, record companies, artists and other copyright owners in China. The U.S. Trade Representative and Commerce Department deserve enormous credit.

This announcement may be an important first step, but we look to the Chinese Government to ensure that future deeds match present words and commitments. Immediate action by the Chinese authorities to address these problems is critical. Chinese commitments in prior years have not been fully implemented. We will closely monitor implementation of these new commitments. We call upon China to ensure that this program reduces piracy by 50 percent from its current levels by the end of the year, with further verifiable and significant reductions in the following

years so that the legitimate business can expand and TRIPS level enforcement be achieved.

We have also advocated that China remove existing barriers to market access for legitimate sound recordings. Thus far, China has not done so. The vacuum in the marketplace caused by China's market barriers will always be filled by pirates who, by the nature of their illegal activities, do not adhere to legitimate rules. We strongly urge that China immediately begin to remove practices that limit market entry and the distribution of legitimate materials. For example, shortening the time for censorship approvals and permitting wholly-owned foreign investments in all aspects of sound recording activity would be welcome steps to ensure that China reaches its potential for generating legitimate commerce in copyrighted materials.

BRAZIL

In past years, Brazilian pirates stole the entire music cassette market. They are now doing the same to the CD market, destroying what was once a vibrant and profitable market for our members. Our industry lost an estimated \$340 million from piracy in Brazil in 2003, a 52% piracy rate.

Organized criminal elements, from within and outside Brazil, exercise control over the production and distribution of infringing copyrighted products. Brazilian pirates produce much pirated product on blank CD-R, which is imported or smuggled from abroad, and enters the Brazilian market through Brazil's weak border controls.

The most serious deficiency in Brazil involves ineffective, non-deterrent criminal enforcement. While good laws are in place, enforcing these laws has met with abysmal results. Although a few Brazilian police units have conducted a substantial number of raids, these raids have resulted in very few criminal prosecutions. Over the last six years, the ratio of convictions to the number of raids run each year is less than one percent. In those few cases that reach judgment, the sentences are not deterrent.

A GSP decision with respect to Brazil is due on July 1. We believe it is time for the U.S. Administration to conclude that which has been evident for quite some time; that Brazil fails to provide adequate and effective intellectual property protection as required under the U.S. GSP statute.

While there has been some welcome cooperation between certain Brazilian authorities and our industry, consistent and systematic anti-piracy results from the Brazilian government have been thus far quite inadequate. We are very pleased that the Brazilian Congress has established a Brazilian Parliamentary Inquiry on Piracy. Representatives from this Inquiry recently visited Washington and signed a joint declaration with members of the U.S. Congress' International Anti-Piracy Caucus committing themselves to improving copyright protection in Brazil. This Inquiry is due to expire at the end of this month. We strongly support its re-chartering and continuation. We praise the positive, effective actions this Inquiry has already taken against piracy in Brazil and will do all we can to help them in their continuing efforts.

The remainder of the Brazilian Government should follow this example and undertake an effective national anti-piracy plan to reduce copyright piracy. The Brazilian Government should:

General Enforcement

- Conduct a vigorous national anti-piracy campaign.
- Significantly improve and implement deterrent criminal enforcement, including persistent raiding, effectively prosecuting in a speedy manner and convicting copyright pirates in all industry sectors.
- Establish federal task forces across the country, creating an anti-piracy coordinator in each State office, which would include formal and specific operational coordination with industry sectors.
- Create a centralized unit of police officers to work on important copyright cases, and provide them with specific guidelines to conduct their cases.
- Direct the Federal Police and Customs to intensify inspections along country borders, and adopt more efficient norms to intercept contraband, blank CD-R's and pirate recorded CD imports. Require Customs authorities to keep statistical records of seizures of products.
- Expedite issuance of search warrants, especially in criminal cases where sometimes it has taken up to six months to obtain such warrants.
- Support the various enforcement agencies working with copyright industries in anti-piracy actions, use organized crime units in intellectual property actions, and increase resources and training for these agencies.

Prosecution

- Speed up criminal copyright infringement prosecutions and expedite judicial orders to destroy confiscated piratical and counterfeit products.
- Assign dedicated prosecutors in each State to lead anti-piracy campaigns that include major investigations of organized crime groups as well as keeping major commercial areas free of pirate product street vendors.
- Secure convictions against businesses that are replicating and distributing optical discs illegally.

Criminal Convictions/Civil Judgments

- Apply the new criminal code amendments in copyright infringement cases.
- Assign piracy cases to judges trained and experienced in intellectual property cases with a view to establishing specialized IP courts.
- Reduce bonds and increase timely decisions in civil copyright infringement cases.
- Create a specialized court which adjudicates copyright infringement cases.

Politically

- The recommendations of the CPI should be issued this summer and promptly acted upon.
- The CPI itself or a comparable body should be made permanent and continue acting aggressively against piracy.

PAKISTAN

Eight known facilities in Pakistan produced upwards of 180 million discs in 2003, nearly all illegal, about 160 million of which were exported to at least 46 countries. Our industry lost \$70 million to piracy in Pakistan in 2003, and suffered a 100% piracy rate.

The Pakistan government to date has taken only cosmetic steps to curtail production or export of pirated product. In 2001, the IIPA filed a petition with USTR to remove Pakistan's preferential tariff benefits under the U.S. "GSP" program because of the frightening growth of production of pirated optical discs in Pakistan. Acceptance of this petition and initiate an investigation remains "pending" before the U.S. Executive Branch. We urge that an investigation be promptly commenced and vigorously pursued.

It is crucial in the context of our larger bilateral relationship that Pakistan live up to its obligations to provide adequate and effective copyright protection and take immediate steps to eradicate piracy in all forms, including optical disc piracy. Its failure to address this large and growing organized criminal activity will have far reaching implications for the rule of law in general, and will undermine Pakistan's ability to provide a stable democratic regime. Pakistan's inadequate enforcement system fails to "prevent infringements" and fails to provide "remedies that constitute a deterrent to further infringements," as required by the WTO's "TRIPS" agreement. Despite skyrocketing production, distribution and export of pirate optical discs, Pakistan has not initiated meaningful actions—criminal, civil or administrative—against its fast-growing pirate optical disc producers.

The Government of Pakistan should:

1. Shut down known production facilities (if necessary, by temporary order). Permit production only upon demonstration of licenses to produce legitimate materials (whereupon supervised access to the plant should be granted to permit the legitimate production).
2. Stop all pirate exports of optical discs from Pakistan.
3. Issue a directive to courts on the seriousness of copyright crime and the need to impose deterrent penalties in cases of commercial piracy. Train police, prosecutors and judges on these issues. Strengthen and impose maximum criminal fines.
4. Pass and implement an effective optical disc law to control production, including monitoring and control on imports of production equipment and raw materials (including polycarbonate), and require use of unique source identifiers (SID Codes) to track the location of production.
5. Pass a law to implement the WIPO "Internet" treaties, and join the treaties.

OTHER COUNTRIES WHERE PIRACY IS SEVERE

As noted, the U.S. recording industry also suffers major piracy losses in Mexico, Taiwan, Thailand, Malaysia, Paraguay and Ukraine.

- *Mexico*: Piracy of sound recordings in Mexico in 2003 resulted in \$360 million in estimated losses, with piracy levels of 61%. While the Office of the Attorney General has provided excellent support, Mexico needs to improve investigations and raids against pirates; organize actions with municipal and state authorities that will limit the distribution of pirate product through over 50,000 street vendors; encourage prosecutors to bring cases swiftly and press for maximum sentences in order to improve deterrence.
- *Taiwan*: Over the last 5 years, piracy rates, including on-line piracy, increased to the point of severely threatening the economic health of other local and international copyright-based businesses. Piracy of sound recordings in Taiwan resulted in \$58 million in losses in 2003, with piracy levels of 40%. Taiwan should adopt needed amendments to its copyright law including more effective and deterrent enforcement tools, establish clear liability for secondary infringements online and an effective notice and takedown system to fight all traditional, digital and Internet piracy. Taiwan must prevent adoption of negative amendments that would impose compulsory licenses on internet transmissions of copyrighted works. Taiwan should continue a sustained copyright enforcement campaign throughout 2004 against all pirates, particularly against the organized criminal syndicates and bring effective enforcement against Internet piracy generally and make significant enforcement inroads against peer-to-peer piracy.
- *Thailand*: Our industry lost \$26 million to piracy in 2003, with a 41% piracy rate. Thailand is capable of significantly reducing piracy but, with rare exceptions, has not shown the political will to do so. As a potential free trade agreement partner, Thailand must provide much better copyright protection. It should take swift action against its many pirate optical disc factories; clean up street markets and malls and keep them clean, and pass an effective optical disc law and implementing regulations that make changes to the 2002 bill needed to make it effective.
- *Malaysia*: Piracy rates have declined markedly, from \$110 million in 2002 to \$40 million in 2003. Malaysia needs to do more to ensure the sustainability of their enforcement efforts, particularly by criminally prosecuting the more egregious pirates. We also urge Malaysia not to impose price controls on our products.
- *Paraguay*: The new government seems well-intentioned. Yet, enforcement efforts taken by Paraguayan authorities, however well intentioned, continue to be largely ineffective. Piracy rates remain at 99% and our losses exceed \$150 million. Paraguay must improve border enforcement by intercepting and seizing pirate goods, enacting legislation to increase criminal penalties for copyright infringement (elevating IPR violations to be "major crimes"), control the points of entry for the importation of CD-R's, and audit for tax evasion large-scale importers of blank CD-R's who are suspected suppliers to pirate organizations.
- *Ukraine*: Our industry loses \$125 million annually and the piracy level is 75%. Ukraine is a major transit country for illegal optical discs that predominantly originate in Russia and Ukrainian optical disc manufacturers are still suspected of pirate activity. Despite private sector and USG assistance and training, Ukraine continues to fail to provide adequate regulation and effective enforcement of optical media production and distribution facilities. Moreover, pirates benefit from prosecutorial delays, slow and cumbersome criminal proceedings and the absence of deterrent sentencing, as well as very ineffective border enforcement.

CONCLUSION

On behalf of the entire music industry, I thank you for your concern about the devastating effect of piracy on America's composers, performers and producers and the thousands of hard working Americans whose jobs are linked to our industry. Piracy robs Americans of the fruits of their creative genius while negatively affecting our international competitiveness. We urge you to speak out about this problem to foreign leaders that you encounter in your work. Please raise piracy, particularly with leaders of the countries mentioned in my statement, at every opportunity. These governments must come to realize that music piracy undermines our culture and their own. The leaders of these countries will only take this matter seriously if they come under pressure from every person in every branch of the American gov-

ernment that piracy of the magnitude they currently permit is simply unacceptable to the United States government, and that failure to address it is not without consequence.

An official from WIPO recently said that: “The correlation between the progress of the human race and its ability to invent and innovate is indisputable. Intellectual property is at the heart of the endeavor.”

If intellectual property is the heart of progress, we are its soul, and our very livelihood is dependent upon our ability to protect the works that we create. Unless we are able to do something about rising piracy levels across the globe, we will no longer have the ability to invest in the creation of new recordings. That will represent a silence that is most assuredly not golden.

Thank you.

The CHAIRMAN. Thank you very much, Mr. Bainwol.

I'd like to call now upon Mr. Robert W. Holleyman II, President and CEO of Business Software Alliance, here in Washington, DC.

Mr. Holleyman, will you please proceed?

STATEMENT OF ROBERT W. HOLLEYMAN II, PRESIDENT AND CEO, BUSINESS SOFTWARE ALLIANCE, WASHINGTON, D.C.

Mr. HOLLEYMAN. Thank you, Mr. Chairman.

It's a pleasure to have the opportunity to talk this morning with you and members of this distinguished committee about some of the international challenges we face in fighting the theft of business software.

The members of the Business Software Alliance produce productivity software that is used in roughly 90 percent of the global market. We're the leaders not only in products in American business, but also the distinct leaders around the globe.

I'd like to thank this committee for scheduling this hearing, because the theft of intellectual property is, I think, the single biggest problem facing the growth of the American software industry, both internationally and it's also a significant problem here in the United States.

Piracy is costing our industry billions of dollars a year. It's resulting in lost tax revenues, it's resulting in lost investments in future innovative products, and it harms the economy.

I'd also like to thank members of this committee, the Ranking Member, and Senator Allen for sponsoring anti-counterfeiting measures—as well as Senator Allen's efforts to ensure that the State Department has the tools to provide training to our key allies overseas in fighting piracy. This really is a collective and a global effort.

Why does it matter? In the U.S., the IT sector employs 2.6 million people, and they're in high-wage, high-skill jobs. We raise \$342 billion in taxes annually, and contribute \$405 billion each year to the U.S. economy. But we can't achieve our full economic potential, due, in large part, to the pervasive problem of piracy. Piracy costs the software industry \$2 billion in the U.S. alone; and worldwide each year piracy costs the software industry in excess of \$13 billion. Nearly 40 percent of the business software in use around the globe is pirated.

One of the things that BSA has done to try to build more partners internationally for our efforts is examine the extent of the software piracy problem. We commissioned a report last year by the respected research firm, IDC, that looked at more than 50 countries and analyzed the impact of piracy on their local econo-

mies—what it meant for local job losses, what it meant for local tax losses. And what we concluded through the IDC report is that if we could reduce global piracy rates for software by ten points—and I would say that that is imminently achievable—that could result in one-and-a-half million new jobs around the world, \$64 billion in new taxes, and \$400 billion in economic growth. So there's a strong incentive, not only for the U.S. to do this, but for our key partners to do it as well.

Software piracy is very similar to many of the types of piracy that my colleagues have talked about and are well familiar with. We have counterfeit software. Internet piracy is a rapidly-growing form of piracy for software that's quickly moving to the peer-to-peer environment. Last year alone, we sent 170,000 notices about piracy of our members' software that we are finding through use of a web crawler, and we share the concerns of our colleagues on those key issues. But I will note that, distinguishable from our colleagues, the biggest form of piracy that we face today for business software is organizational end-user piracy, and that is when otherwise legitimate businesses, governments, universities are deploying far more copies of their business software than they have licensed. And so we share the concerns of our colleagues here, but we also have an additional concern that is very important and unique to business software.

We do think technology will be part of the solution. Our members are increasingly deploying very simple technological activation tools to try to prevent the piracy of their products. They are very consumer friendly, and they are very fast—under a minute—to deploy. And we think that activation technologies will reduce some of the casual copying of software.

But specifically to make broader improvements for both software and for all of our industries, we feel that there are three things that are important. One is to ensure that there is full TRIPS implementation. Governments have obligation under the WTO TRIPS treaty to both have laws that protect intellectual property, but also effective enforcement of those laws. We believe that those two elements are critical, and the effect will deter piracy. And that's why we believe and support the 50 percent reduction in China that my colleagues have talked about as being a necessary part of an effective deterrence to meet TRIPS obligations.

The WIPO copyright treaty implementation is also a key negotiating objective for the U.S. Government should encourage every nation to both ratify and implement that treaty to ensure that there's adequate enforcement in the digital age. We also believe that countries should adopt laws that are fundamentally consistent with principles that we've adopted here after ratifying the treaty, specifically the U.S. Digital Millennium Copyright Act that contains key enforcement efforts, measures that should be adopted by our trading partners. And, finally, we have to devote adequate resources. They have to be dedicated resources, they have to lead to the prosecution of piracy in all its forms, and they need coordination, training of law enforcement and judges, and cooperation across borders. And that's why the U.S. opportunity for leadership in providing help and training of both prosecutors and law enforcement officials is critical globally.

The recent FTAs that the U.S. has negotiated have been instrumental in setting the type of framework that the U.S. will insist upon from all of our trading partners. IP chapters have been included in all of those agreements. They reference laws like the USDMCA, and they are critical to pave the way for the type of progress we want to achieve.

In conclusion, Mr. Chairman, let me comment on a reference that you made in your opening statement to international partners. I returned from a trip to Japan last week. And I will say that the software piracy rate in Japan has declined from 66 percent in 1994 to 35 percent in 2002. Now, that's still way too high, and unacceptable, and it results in one and a half billion dollars in losses a year. But we believe that Japan can be, and should be, an ally for the U.S. Government on anti-piracy issues.

When I was in Tokyo, I met with the Secretary General for Intellectual Property Strategy, which is part of the cabinet secretariat in Japan. He indicated to me that piracy of Japanese intellectual property, particularly in China, was paramount. And, in fact, for the first time, they were charging their Ministry of Foreign Affairs with having their embassies in places like Beijing establish intellectual property bureaus, making this a chief negotiating objective for Japan.

So I do think that there are allies like Japan and other countries who will engage with us as partners, and that we can then use our multilateral tools and our bilateral tools to help reduce software piracy and to help benefit the entire U.S. intellectual property sector.

The work of this committee in all of those areas is absolutely critical. We look forward to continued engagement. Thank you for your help, and I appreciate your efforts on behalf of the American software industry.

Thank you.

[The prepared statement of Mr. Holleyman follows:]

PREPARED OF ROBERT HOLLEYMAN

Good morning. My name is Robert Holleyman. I am the President and CEO of the Business Software Alliance.¹ The Business Software Alliance is an association of the world's leading software companies and their key hardware partners. BSA's members create approximately 90% of the office productivity software in use in the U.S. and around the world.

I thank the committee for the opportunity to testify here today. The theft of intellectual property, commonly known as "piracy," is a matter of great concern to the business software industry. Piracy costs the industry billions of dollars in lost revenues each year. It reduces investment in creativity and innovation. And it harms national economies including our own.

In my testimony, I intend to give a brief overview of the contributions that the business software industry has made and continues to make to the global economy and to describe how piracy has undermined those contributions. I will next describe the evolving challenges the software industry faces with respect to piracy and explain the steps industry is taking to address these challenges. Finally, I will sum-

¹The Business Software Alliance (www.bsa.org) is the foremost organization dedicated to promoting a safe and legal digital world. BSA is the voice of the world's commercial software industry and its hardware partners before governments and in the international marketplace. Its members represent one of the fastest growing industries in the world. BSA programs foster technology innovation through education and policy initiatives that promote copyright protection, cyber security, trade and e-commerce. BSA members include Adobe, Apple, Autodesk, Avid, Bentley Systems, Borland, Cisco Systems, CNC Software/Mastercam, Entrust, HP, IBM, Intel, Internet Security Systems, Intuit, Macromedia, Microsoft, Network Associates, RSA Security, SolidWorks, Sybase, Symantec, UGS and VERITAS Software.

marize the lessons that we have learned regarding how best to end piracy both here at home and abroad.

First, though, let me begin by thanking the members of the committee for hosting this hearing. BSA and each of its member companies commend you for recognizing the software industry's important contributions to the global economy and the serious threat posed to the industry by software piracy.

SOFTWARE INDUSTRY CONTRIBUTIONS AND THE IMPACT OF PIRACY

Information technology has changed the world in which we live. It has made us more efficient, more productive and more creative. Software has been at the heart of this technology revolution. Software facilitates the dissemination of knowledge, drives global communication and promotes continued innovation. It helps us to solve problems and generate new ideas, gives us the power to create and to collaborate and fosters self-expression in a range of spheres.

The information technology sector, driven by the software industry, has also proven to be a remarkable engine for global economic growth. A recent economic survey (attached) by IDC, a major IT research firm, reports that worldwide the IT sector employs more than nine million people in high-wage, skilled jobs, raises more than \$700 billion in taxes annually and contributes nearly a trillion dollars each year to global economic prosperity. Between 1996 and 2002, the IT sector grew 26%, creating 2.6 million new jobs and adding a cumulative \$6 trillion to economies around the world. Each year, the packaged software sector alone contributes in excess of \$180 billion to the global economy.

While these numbers testify to the economic force of the software industry, this sector has yet to reach its full economic potential. This is due, in large part, to piracy. In 2002 we measured the global piracy rate at 39%. In many countries the piracy rate exceeded 75%, reaching highs of over 90% in some markets. Although piracy levels in the U.S. historically have been low as compared to other countries, the figure is far from negligible. In 2002 the U.S. piracy rate was 23%. Nearly one in every four copies of business software in use in this country today is stolen. There are few industries that could endure theft of its products at this level.

Piracy inflicts significant financial harm on U.S. software companies. Piracy in the U.S. alone cost the software industry almost \$2 billion in 2002. Worldwide, piracy led to estimated losses of over \$13 billion. Those figures cover only the market for packaged PC applications. If our survey were expanded to cover the broader PC market, including operating systems, we would expect to see even higher dollar losses. Publishers invest hundreds of millions of dollars every year and immeasurable amounts of creativity in designing, encoding and bringing new products to market. They depend upon the revenue they receive from those products to obtain a return on their investment and to fund the development of new products. Piracy undermines this model.

Of course, the impact of piracy extends beyond lost sales. Pirates steal jobs and tax revenues as well as intellectual property. The IDC survey cited above found, as a general rule, that there is an inverse relationship between software piracy rates and the size of the IT sector as a share of the gross domestic product. As piracy is reduced, the software sector grows. This creates a ripple effect that stimulates other parts of the IT sector and of the economy overall. The equation is a basic one: the lower the piracy rate, the larger the IT sector and the greater the benefits. Putting this into real numbers, the IDC survey concludes that a 10 point reduction in the global piracy rate between 2002 and 2006 could deliver 1.5 million new jobs, \$64 billion in taxes and \$400 billion in new economic growth. In North America alone, benefits would include 145,000 new jobs, \$150 billion in additional economic growth and more than \$24 billion in tax revenues.

Reducing piracy delivers indirect benefits as well. Society benefits from new technological innovations. Consumers benefit from more choices and greater competition. Internet users benefit from new ways of communication and expanded creative content made available online. And national economies benefit from enhanced productivity leading to higher standards of living.

Piracy: Defining the Problem

In its simplest terms, "software piracy" generally refers to the reproduction or distribution of copyrighted software programs without the consent of the copyright holder. In most countries around the world, the law makes clear that when a person copies or distributes software, they must have authorization from the copyright holder through a license agreement or otherwise, unless the copyright law provides a specific exception for such activity. Otherwise, such activities constitute piracy.

Piracy of software can take several forms:

- *Organizational end-user piracy*

Counterfeiting of software and Internet piracy are significant concerns to the software industry, just as they are for the entertainment industry. However, the business software industry's worst piracy problem traditionally has involved its primary users—large and small corporate, government and other enterprises—that pirate our members' products by making additional copies of software for their own internal usage without authorization. We commonly refer to this activity as "organizational end-user piracy".

Organizational end-user piracy occurs in many different ways. In what is perhaps the most typical example, a corporate entity will purchase one licensed copy of software, but will install the program on multiple computers. Other forms of end-user piracy include copying disks for installation and distribution, in violation of license terms; taking advantage of upgrade offers without having a legal copy of the version to be upgraded; acquiring academic or other restricted or non-retail software without a license for commercial use; and swapping disks in or outside the workplace. Client-server overuse—when too many employees on a network have access to or are using a central copy of a program at the same time, whether over a local area network (LAN) or via the Internet—is another common form of end-user piracy.

It is impossible to describe the typical organizational end-user pirate. This activity goes on in enterprises large and small, public and private. While end-user pirates do not generally make copies for resale or commercial distribution, they nonetheless receive an unfair commercial advantage because the money that they save on legitimate software licenses reduces their operating costs and increases the profitability of their enterprise. In some cases, the piracy is attributable to negligence and poor asset management practices. Enterprises can also be victimized by unscrupulous computer manufacturers and dealers who install copies of software onto the internal hard drive of the personal computers they sell without authorization from the copyright holder. In many cases, however, organizational end-user piracy is undertaken willfully, with management fully aware and supportive of the conduct.

- *Counterfeiting*

Counterfeit software continues to pose a serious problem for BSA's members. The most flagrant software counterfeiters produce CD-ROMs that look very similar to those of the software publisher. These counterfeit CD-ROMs often bear reproductions of the manufacturer's logo and other labeling, and are distributed with counterfeit packaging, manuals, security features and other documentation. Sophisticated counterfeiters often replicate these CD-ROMs at dedicated pirate facilities, using the same type of equipment and materials used by legitimate software manufacturers. A single CD-ROM replication facility can produce more than a million discs every day, at a per-unit cost of less than two dollars. In other cases, counterfeit CD-ROMs have been traced to "legitimate" replicating plants that have contracted directly with counterfeiters.

Over the past several years, BSA has seen a dramatic increase in the amount of high quality counterfeit software imported into the U.S. from overseas, especially from Asia. International counterfeiting rings have become even more sophisticated in their methods of producing "look alike" software and components. For example, raids in Hong Kong uncovered evidence of advanced research and development laboratories where counterfeiters reverse-engineered the security features of at least one member company's software media. Another approach used by counterfeiters is to obtain genuine security features illegally, and use them on pirate copies of software. All of these activities are often connected with serious criminal organizations, as investigations in Asia, Europe, and Latin America have revealed. Compared to other similarly lucrative crimes like narcotics trafficking or arms dealing, software piracy is easy to pursue and low-risk; chances of getting caught are slim and, if caught, penalties are often light. Even in the U.S., the criminal laws can and should be augmented to assure that counterfeiters who engage in practices like the illicit use of genuine security features can be brought to justice. Legislation like S. 2227 can serve as a model for other countries to follow in combating piracy, and we thank Senators Biden and Allen for sponsoring this important measure.

Compilation CD-ROMs also pose a problem. These CDs typically contain a large selection of software programs published by different software companies. Compilation CDs are typically sold for very little money (relative to the value of the legitimate software) at swap meets, flea markets, mail order houses, and over Internet auction and software web sites. Compilation software can be replicated using a relatively inexpensive (less than \$1,000) CD recorder which, when connected to a personal computer, employs a laser to "burn" installed software programs onto a blank

disc. Although compilation CDs do not exactly replicate the packaging and logos of genuine software, unsophisticated consumers are often led to believe that compilation CDs are legitimate promotional products.

- *Internet piracy*

The Internet is the future of global communication and commerce. It creates tremendous opportunities for faster, more efficient and more cost-effective distribution of information, products and services across the globe. As technology innovators, BSA's members are at the forefront of these developments. Software is not only sold and delivered over the Internet, but also comprises a key component of the Internet infrastructure and provides the basic tools used to offer virtually any good or service online.

Unfortunately, in addition to creating significant social and economic opportunities, the borderless and anonymous character of the Internet makes it an ideal forum to engage in criminal conduct. As we have seen, the emergence of the Internet has added a new dimension to software piracy by permitting electronic sales and transmission of illegal software on a global scale. Instead of pirated copies being sold one at a time, millions of pirated copies can be downloaded every day. Geography no longer matters. A pirate based in Washington, D.C. can sell to someone in Australia or Norway with ease. Internet users can readily employ a search engine to find both legitimate and illegitimate sellers of software and the resulting transaction can take place in the privacy of their home or office. The ability of Internet pirates to hide their identities or operate from remote jurisdictions often makes it difficult for right holders to find them and to hold them accountable.

Over the past two years, BSA's Internet investigators have witnessed the global spread and growth in the online piracy of software. Today, computer users can and do download infringing copies of BSA members' products from hundreds of thousands of locations on the Internet—from websites in China to shared folders on peer-to-peer systems in France. Pirated software is available on auction sites in Brazil and is offered through spam email solicitations that originate in Russia. To cite but one figure, during the month of February, BSA's Internet crawler system identified 173,992 infringing software programs being offered in 149 different countries.

There are three primary forms of Internet piracy: (i) the transmission and downloading of digitized copies of pirated software, through web sites, IRC channels, newsgroups and peer-to-peer systems; (ii) the advertising and marketing of pirated software on auction and mail order sites and through e-mail spam, involving delivery on physical media through the mails or other traditional means; and (iii) the offering and transmission of codes or other technologies used to circumvent copy-protection security features. There are, of course, many variations on these general themes. All of these activities cause significant harm to our industry, as they do to other creative sectors.

Among these variants of Internet piracy, peer-to-peer piracy (P2P) has been the subject of significant public debate over the past two years. BSA takes P2P piracy very seriously. We are engaged in concerted action to address this threat. While BSA and its members deplore this activity, however, we believe it is essential to distinguish the illegal uses of the technology from the technology itself. There is no doubt that P2P technologies have been abused to spread illegal content including pirated software, pornography and personal information. At the same time, however, P2P technologies have also created exciting new opportunities for legitimate users. One of the earliest examples of P2P technology is the SETI@Home project, which uses over 4 million computers worldwide to search radio signals captured from space for signs of intelligent life. Stanford is using P2P technology to help find cures for diseases such as Alzheimer's, cystic fibrosis and BSE (mad cow disease). Software companies are also looking to P2P technologies to undertake routine tasks such as distributing updates for installed software including anti-virus and firewall software; in this way, software can be constantly updated in response to new Internet threats.

- *Industry Efforts against Piracy*

The Business Software Alliance and its individual members devote significant financial and human resources to preventing piracy worldwide. Our efforts are multifaceted.

First, we are engaged in extensive educational efforts, designed to increase public understanding of the value of intellectual property and to improve overall awareness of copyright laws, on a global basis. For example, in March BSA launched "Netrespect," a free educational resource to encourage responsible Internet behavior amongst young people. This initiative, first rolled out in Ireland, responds to a grow-

ing need to promote cyber education, beginning with encouraging teenagers to value creativity, respect intellectual property and practice responsible computer behavior. In the U.S., BSA offers parents, teachers and students a variety of free materials and tools on cyber ethics, including its curriculum, "Play It Safe In Cyberspace." The curriculum is available for free download at www.PlayItCyberSafe.com and was co-produced by the children's publisher *Weekly Reader*. Since its initial distribution in 2002, the curriculum has reached more than 13 million kids, parents and teachers. In addition to our broad-reach educational campaigns, BSA offers many tools to facilitate compliance. Among other resources, we provide guides and technologies that assist end-users in ensuring that their installed software is adequately licensed. We likewise offer tips to consumers so that they can be confident that the software they acquire on-line is legitimate.

Second, we work closely with national and international bodies to encourage adoption of laws that strengthen copyright protection and promote an environment in which the software industry can continue to innovate. BSA has provided input into the most important international agreements protecting intellectual property, including the World Intellectual Property Organization's Copyright Treaty and the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs). We are active at the national level as well, both in the area of law reform and through the provision of training and other assistance to public authorities including police, prosecutors and judges. And we have worked directly with governments worldwide, including the U.S. Government, to adopt and implement software asset management programs in order to prevent software piracy in the public sector and to set an example for the private sector to follow.

Finally, where appropriate, BSA undertakes enforcement actions against those involved in the unlawful use, distribution or sale of its members' software. On the Internet, for example, BSA conducts a far-reaching "notice and takedown" program. Operating on the basis of referrals from members, complaints from consumers and infringing activity identified through our own proactive searches, BSA's team of Internet investigators identifies infringing sites and takes action to have these sites removed or disabled. Last year alone, BSA sent tens of thousands of notices to Internet service providers. BSA's members have also filed suit against individuals offering pirated software for free download and over auction sites. BSA also engages in civil litigation against corporate end-users who are using our members' products without authorization. To this end, and consistent with the WTO TRIPs Agreement, we conduct civil "ex parte" (surprise) searches against corporate targets across the globe. We also work closely with local, national and international law enforcement bodies to protect the intellectual property rights of our members.

Of course, technology plays a role in protecting intellectual property rights as well. Content owners must take responsibility to ensure that their works are not easily subject to theft, rather than rely wholly on others to protect their intellectual property. Accordingly, BSA's members have invested hundreds of millions of dollars and thousands of engineering hours in developing technologies to protect content and intellectual property. Our companies have worked diligently, voluntarily and cooperatively with content providers and consumer electronics companies to create systems that will foster the legitimate distribution of digital content. Experience clearly demonstrates, however, that there is no silver bullet technological solution that will solve the problem of piracy. Nor are government mandates the answer. Technology develops most effectively in response to market forces; government mandates would stifle innovation and retard progress.

The Role of Government

The ability of countries to reap high economic benefits from the software sector is highly dependent on their ability to promote protection and enforcement of intellectual property rights. Multilateral and bilateral trade alliances must be fully backed by governments' firm commitment to respect and enforce intellectual property rights within the public and private sectors; to treat the manufacture and sale of counterfeit software as a crime warranting tough enforcement and penalties; and to ensure that its laws and enforcement regimes adequately address all forms of piracy. This committee can help promote this commitment to intellectual property protection by:

- ensuring that governments worldwide fulfill their obligations under the WTO TRIPs Agreement by adopting and implementing laws that provide for effective enforcement against piracy;
- encouraging implementation of the WIPO Copyright Treaty and strong criminal enforcement of the measures therein; and

- urging countries to dedicate resources to the investigation and prosecution of piracy in all its forms, as well as to training, technical assistance and mutual cooperation.

- *Strong, workable enforcement regimes, as required by TRIPs*

While substantive copyright protections are essential to bring piracy rates down, experience has demonstrated that these protections are meaningless without adequate mechanisms to enforce them. The 1994 World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) provides the framework for such mechanisms.

TRIPs requires that intellectual property rights enforcement regimes meet specific “results-oriented” performance standards. Specifically, each member’s enforcement regime must “permit effective action against infringement” and “constitute a deterrent to further infringements.” Moreover, enforcement procedures cannot be “unnecessarily complicated or costly,” or “entail unreasonable time limits or unwarranted delays.” Thus, in assessing TRIPs compliance, it is critical to review and monitor all aspects of a country’s enforcement regime, including the adequacy of procedural remedies and penalties, as well as their effectiveness in deterring piracy.

In addition to establishing general standards for enforcement, TRIPs specifically requires that countries provide an effective civil system of enforcement, provisional remedies to preserve evidence, extensive customs procedures to stop infringing goods at the border, and criminal penalties for counterfeiting and piracy. Given the emergence of organized criminal counterfeiting operations, it is imperative that all governments fulfill their obligation under the WTO TRIPs Agreement to enact and enforce strong criminal remedies against piracy, including tough, effective penalties. Moreover, to combat rampant piracy among corporate end-users, these criminal laws must be supplemented by civil remedies that allow software publishers to obtain civil “ex parte” search orders and adequate damages, without significant judicial delays or overly burdensome bond requirements.

- *Full and faithful implementation of the WIPO Copyright Treaty*

In direct response to the growing threat of Internet piracy, the international community in 1996 adopted the WIPO Copyright Treaty to ensure protection of copyrighted works in the digital age. The Treaty came into force just over five years later, in March 2002, following ratification by 30 member countries. Among other measures, the WIPO Treaty (i) makes clear that a copyrighted work can be placed on an interactive network only with the consent of the relevant right holder; (ii) makes clear that the Berne Convention’s reproduction right applies to electronic uses of works; (iii) protects all forms of expression of computer programs; and (iv) prohibits “hacking” of technical protections that have been applied to works. These measures ensure that authors’ rights will be respected in cyberspace.

The United States was one of the first countries to implement the WIPO Copyright Treaty by enacting the Digital Millennium Copyright Act (DMCA). In addition, Congress has enacted legislation that criminalizes online distribution of pirated software and increases penalties for Internet piracy. To ensure that these laws have real impact, U.S. law enforcement agencies have elevated the priority given copyright offenses including Internet piracy, resulting in important prosecutions against criminal pirates and counterfeiters. Following on these measures, the number of Americans on the Internet has nearly doubled, from 70 million people to 137 million. The copyright industry has expanded at a rate of 10% each year. And last year, copyright industries contributed \$535 billion dollars to the U.S. economy—more than 5% of the gross domestic product.

Similar measures are urgently needed need on a global basis. While many countries have taken steps toward improving and enforcing laws in this regard, much more remains to be done.

- *Dedicated resources to fight piracy*

Ending the theft of intellectual property is a low priority in many countries. Piracy investigations are often delegated to law enforcement units with little or no training in intellectual property crime and given local rather than national attention, in competition with many other types of crime for attention and resources. Although copyright crimes often involve cross-border activities, there is frequently a lack of coordination among various countries’ law enforcement agencies when investigating and prosecuting pirates. Even where procedures for cross-border coordination do exist, such procedures can be cumbersome and ineffective.

To ensure effective action against piracy, national authorities should establish specialized intellectual property enforcement units at a national rather than local level, who can react quickly and knowledgeably to incidents of IP crime. Better training of law enforcement and the judiciary is equally important, to ensure these

bodies are equipped to deal with these cases. Likewise, better cross-border cooperation among police and other government officials, and improved availability of evidence and judgments for cross-border use, are also essential.

In this regard, BSA would like to take this opportunity to thank Senator Allen for the amendment he sponsored to the foreign assistance bill. This amendment authorizes the Secretary to pursue various activities to combat piracy in non-OECD countries and calls for the appropriation of \$5 million for the training of law enforcement and judicial authorities and the provision of assistance to these countries in complying with international treaties on copyright. Efforts like these promise to reduce global piracy and protect American industry and American innovation.

CONCLUSION

Software contributes profoundly to the world in which we live. It allows us to share, to create and to innovate in ways previously unimaginable. Software-driven productivity strengthens national economies, including our own, and makes them more competitive and more prosperous. Unfortunately, piracy prevents the software industry from realizing its full potential. We urge the U.S. Government and other governments worldwide to help us solve this problem. We thank you for the efforts made to date.

Thank you again for the opportunity to testify here today. I look forward to your questions and to continued dialogue on this important topic in future.

The CHAIRMAN. Thank you very much, Mr. Holleyman.

I'd like to call now upon Mr. Douglas Lowenstein, President of the Entertainment Software Association.

Mr. Lowenstein?

STATEMENT OF DOUGLAS LOWENSTEIN, PRESIDENT, ENTERTAINMENT SOFTWARE ASSOCIATION, WASHINGTON, D.C.

Mr. LOWENSTEIN. Mr. Chairman, thank you.

It's always difficult to follow a panel like this, because they've pretty much said everything there is to be said, and it probably is in everyone's best interest for me to say I just agree with everything that they've said, and move on, although I'm not sure I agree with the part of Jack's testimony where he talked about the entrails of his written testimony. I'm not sure about that part.

(Laughter.)

Mr. LOWENSTEIN. I am really glad to be here, Chairman Lugar, Senator Biden, Senator Allen, Senator Alexander, and Senator Voinovich, and Senator Boxer. All of you have played very important leading roles in protecting intellectual property and helping to wage this important battle.

You know, two years ago, we were here to talk about the problems that global piracy causes our entertainment software industry, and since we last appeared, when Senator Biden actually released his report on the subject, there has been progress toward implementing some of the report's key recommendations. But overall piracy levels and the underlying problem of deeply entrenched criminal enterprises controlling the worldwide piracy trade remain as serious as ever.

The ESA represents the \$10 billion U.S. video and computer game industry. We have members, some of the leading names in software and technology in the world today—names like Sony, Microsoft, LucasArts, Electronic Arts, the fourth largest capitalized software company in the world. They're all part of this growing industry. Collectively, our members produce much of the \$25 billion in software that powers this worldwide entertainment software market. We've doubled in size since the mid 1990s, and we're one

of the fastest growing economic sectors in this country, generating thousands of creative and technology jobs here.

It takes as long as three years and an average of anywhere from five- to ten-million dollars, and sometimes double and triple that, to make a blockbuster video game or computer game these days. But, unfortunately, in our highly competitive market, very few of the roughly 1400 games published a year actually turn a profit. And that brings me to piracy. Billions of dollars worth of pirated entertainment software circulate freely in markets abroad, countries like China, Malaysia, Thailand, and Russia, Brazil, as you've mentioned, all host pirate optical disc and pirate cartridge factories that flood the world with illegal games. Sophisticated criminal enterprises are behind much of the pirate game trade in these countries, and sophisticated criminal enterprises are also behind the pirate trade in countries like Mexico and Spain.

Like our colleagues here, we have market access problems in countries like China, and my written statement does go into some great detail, on a country-by-country basis, as to where we face problems.

But, at the end of the day, all this piracy essentially means that distribution of legal copies in large parts of the world is impossible. Essentially, our industry competes now in only four regions—Western Europe, North America, Australia, New Zealand, and Japan. Much of the rest of the world is literally shut down due to illegal copies. And if you'd just imagine the growth numbers I was just talking about that we're generating in just a tiny portion of the world, you can imagine how much growth is still out there if we can get our hands around this problem.

But, clearly, piracy and the revenue it siphons away from this industry makes it that much more difficult to generate the revenue required to fund the R&D to create the top titles required to power the market.

I want to focus, rather than on a country-by-country discussion of our problems, on a couple of specific recommendations, perhaps to respond to some of the comments you made in your opening statement, Mr. Chairman. First, I would like to say that despite the very determined and effective efforts of the Justice Department, the FBI, the Customs Service to fight IP crimes in recent years—and these efforts have been quite heroic and quite important—the bottom line, in my view, is that these agencies can only do so much as they face understandably competing priorities that divide their energies. But, in my view, given piracy's enormous cost to our economy, given the increasing evidence that some terrorists are using IP piracy and counterfeiting to finance their operations, and given the fact, as Jack said, that America's copyright industries represent more than 5 percent of our gross domestic product, it's time to bring to this fight against piracy the same kind of laser-like approach which the Drug Enforcement Administration has aimed at global drug production and smuggling operations.

So we recommend that this committee consider directing our government's IP enforcement resources be pooled into a centrally-directed campaign against international pirate operations. We also know that criminal organizations that are deeply involved in this hard-goods piracy are generally located in countries where local

law enforcement officials are unwilling or unable to target them in a meaningful way. So we recommend that the single-minded enforcement effort I just suggested be combined with a clear and unambiguous directive to our law enforcement community to pursue investigations and enforcement actions against pirate syndicates operating beyond our borders, and these law enforcement agencies should seek whatever additional authorities they need from this Congress to conduct those operations. America's top law enforcement agencies should explore the most effective and cooperative ways, consistent with national sovereignty, to assist local authorities in bringing criminal enterprises to arrest and detention.

I just can't emphasize this more. We will be here year in and year out talking about this problem unless something is done to get at the root of it, which is criminal enterprises that are masterminding the global piracy trade. That is the root of the problem.

Now, we have major issues, of course, on the Internet, and that also ties into organized crime as perhaps we might get into.

My final suggestion would be the creation of a stand-alone intellectual property office within the USTR that has dedicated and adequate staff that's charged not only with negotiating strong IPR agreements—and they've done a great job with that over the years in bilateral negotiations, with FTAs and so forth—but we also have to make sure these agreements are enforced, as well. Much could be gained from holding countries to strict compliance with the obligations they have already signed up to, whether under TRIPS, whether they're under regional agreements, or whether they're under bilateral FTAs. Again, I want to be clear, USTR has done an extraordinary job negotiating these free-trade agreements and other agreements, but it relies on personnel from other federal agencies to perform its monitoring duties. This approach is clearly not optimal. Without constant and consistent oversight, we cannot trust many countries to fulfill their IPR treaty obligations, and, therefore, we risk sacrificing the progress we've achieved through these hard negotiations that our men and women that Jack referred to at USTR and the State Department and elsewhere have worked so hard to bring to fruition.

I also want to align myself particularly with Mitch's comments about the use of the GSP authority. I think it's a very, very powerful lever for us to use against countries that are simply not stepping up to their responsibilities.

In the end, global piracy, as we've all made clear, undermines our economic security. And we are so grateful, Mr. Chairman and the members of this committee, that you continue to dedicate time and energy to solving this problem, particularly when this country and this committee is addressing so many other serious threats to our national security.

Thank you.

[The prepared statement of Mr. Lowenstein follows:]

PREPARED STATEMENT OF DOUGLAS LOWENSTEIN

I. INTRODUCTION

Chairman Lugar, Senator Biden, and members of the committee, I thank you for the opportunity to address issues related to international intellectual property theft

and its devastating impact on the entertainment software industry. I appreciate the opportunity to testify again before this committee on these important issues, as I did in February 2002, when then-chairman Biden released a very comprehensive and compelling report on the problem of international intellectual property piracy.

The Entertainment Software Association (ESA) serves the business and public affairs interests of companies that publish video and computer games, including games for video game consoles, personal computers, handheld devices, and the Internet. ESA members published more than 90 percent of the \$7 billion in entertainment software sold in the United States in 2003. In addition, ESA's member companies produced billions more in exports of American-made entertainment software, helping to power the \$25 billion global game software market. The entertainment software industry is one of the nation's fastest growing economic sectors, more than doubling in size since the mid-1990s and generating thousands of highly skilled jobs in the creative and technology fields.

Our industry makes a tremendous investment in its intellectual property. For an ESA member company to bring a top game to market, it often requires a team often exceeding one hundred professionals in size, including writers, animators, musicians, sound engineers, software engineers, and programmers, to create an end product which, unlike any other form of entertainment, is interactive, allowing the user to direct and control the outcome of the experience. On top of an average \$5 to 10 million in research and development costs, publishers may invest another \$5 to \$10 million to market and distribute the game, with some games totaling \$20–30 million in total costs. The reality is that only a small percentage of these titles actually achieve profitability, and many more never recover their front-end R&D costs. In this type of market, it is easy to understand how devastating piracy can be as it siphons the revenue required to sustain the enormously high creative costs necessary to produce successful products. If the profits from a hit game are stolen by pirates, the games—and the jobs—subsidized by those profits are jeopardized.

In this testimony, I will review the many international intellectual property piracy challenges we face today. I will also look back to the recommendations we made two years ago in our testimony before this committee, as well as some of the recommendations in Senator Biden's report, to assess the progress made on these to date, and suggest further steps the government can take to ensure greater protection of our industry and of one of this nation's most valuable assets—its intellectual property.

II. THE PIRACY PROBLEM

Due in part to the immense popularity of video games, entertainment software piracy is a widespread problem in most countries throughout the world. Piracy of entertainment software spans a wide range of activities in all types of venues, both public and private. For ease of analysis, however, we classify such activities into two general categories: hard goods piracy (involving production and distribution of physical copies) and Internet piracy (involving the reproduction and transmission of copies in digital form). As pirate activities involving game software continue to multiply, billions of dollars worth of pirated entertainment software products circulate freely in markets abroad, preempting the possibility of legitimate distribution channels taking root and growing into healthy environments for ESA members' games.

Hard Goods Piracy

Entertainment software programs are produced for a number of different platforms, diverse in nature and technology, including video game consoles, personal computers, handheld devices, and the Internet. Hard goods piracy covers a variety of activities, the most pernicious involving the illegal manufacturing of (1) counterfeit optical discs for use in personal computers (PCs) and game consoles such as Microsoft Xbox and the Sony PlayStation2, and (2) counterfeit game cartridges for handheld devices such as the Nintendo Game Boy and Game Boy Advance.

Large-scale manufacturing of pirate games, whether in optical disc or cartridge form has been a particularly damaging type of piracy because of the involvement of organized crime, which has facilitated the export and distribution of the pirate products in countries around the world. The components of game cartridges (circuit boards, plastic casings, counterfeit labels, packaging) are often each manufactured separately in small discrete workshops in China and other countries in southeast Asia, and then shipped abroad, either to be assembled in workshops in the country where the games are to be sold, or in countries where they are subsequently shipped in assembled form to other countries where the games are then sold.

Optical media piracy is a particularly significant problem for the industry, as it impacts games published on at least three platforms: PCs, Xbox and PlayStation2. In many parts of the world, especially Malaysia, China, Thailand, and Russia, pi-

rate optical disc factories produce huge numbers of illegal copies of popular games. In its Special 301 report to the Office of the U.S. Trade Representative (USTR) this February, the International Intellectual Property Alliance (IIPA) (of which ESA is a member) reported the unrelenting growth in the number and capacity of optical disc production lines across the globe, particularly in Southeast Asia. In addition to large-scale replication of optical discs, the game industry has been confronted with an explosion in the number of small-scale operations involving the “burning” of games or copying on CD and DVD burners, not only in Asia, but in Europe and Central and South America as well. Although each burning operation makes pirate copies on a much smaller scale than an optical disc replication line, a growing swarm of pirate burning centers in an individual market can cumulatively have an equally devastating effect in elevating local piracy levels.

Hard goods piracy for game consoles is facilitated materially by “mod chips”¹ and other circumvention devices which, when used or installed, are designed to bypass the technological protection measures in game platforms that limit their use to legitimate games. Mod chips for the Xbox and PlayStation2 and the Flash Advance Linker and similar devices for Game Boy and Game Boy Advance games are routinely marketed in countries around the world to enable the use of pirate games on these game systems. Many of these devices (as well as installation services there for) are marketed and sold in the same venues that offer the pirate game copies whose use they are intended to permit. As described below, these circumvention devices also contribute to increasing online piracy involving game software.

As noted earlier, criminal enterprises have become deeply involved in the manufacture and global export and distribution of pirate games. In its 2004 Special 301 report released in February, the IIPA reported that because of the immense profits that pirates can make by stealing intellectual property, criminal organizations have taken over pirating operations in many countries, including Malaysia, Taiwan, Russia, Mexico, and Spain. Such mass counterfeiting activity requires relatively little capital investment, enjoys substantial profit margins on each counterfeit product and poses little risk of arrest or imprisonment as criminal sanctions for intellectual property violations are rarely as severe as those for other kinds of criminal activity. This is especially true compared to the risks associated with trafficking in other forms of contraband, such as guns or narcotics.

Indeed, pirate enterprises seek out countries offering “friendly” host environments in which to base their counterfeit manufacturing operations. These countries typically have outdated intellectual property laws, few enforcement resources (if any) devoted to intellectual property, a lack of understanding of intellectual property among police, prosecutors and judges, and no provision for deterrent penalties for intellectual property violations. In addition to the “protection” afforded by a weak intellectual property enforcement regime, the organizations are often well-entrenched in these host countries, enjoying a fair measure of social and political influence at the local level. In some countries, these large pirate enterprises operate in the open, raking in millions in illegal profits. For example, Professor Daniel Chow of Ohio State University said in recent congressional testimony that the intellectual property piracy problem in China has reached a crisis level, with virtually the entire economy of the Chinese city of Yiwu in Zhejiang Province now based on the trade of pirated products.

Once the pirate product is manufactured, the global movement of such illegal items across international borders is one of the general strengths of organized crime, as they are often well-practiced in distributing other kinds of illegal products. These organizations are able to export not only to countries within their region but also to countries in regions on the other side of the world. Malaysian pirates are among the most efficient exporters of counterfeit optical disc products, as we have seen their pirate games turn up throughout the Western hemisphere from Canada to Argentina, as well as South Africa, Western Europe and Australia. Russian pirates are expert at moving illegally replicated product across borders and into nearby Eastern European markets, including Poland. China is home to a number of enterprises exporting pirate Game Boy and Game Boy Advance products.

The cumulative harm caused by organized crime’s global trade in illegal game products is staggering, with billions of dollars spent annually on pirate copies of games instead of the legitimate versions. These organizations are able to use illegal versions of games downloaded from the Internet within days of a legitimate game’s release in Japan or the U.S. to manufacture and export thousands of copies to countries where the game has not even yet been released. It is not uncommon to see pirate copies of a game available on the streets of many Southeast Asian cities with-

¹“Mod chips” are a particular type of circumvention device that are installed into video game consoles chiefly for the purpose of rendering the console capable of playing pirated games.

in the first week of the game's release. Needless to say, such activity has destroyed any chance for the establishment of legitimate distribution channels in many countries throughout the world, forcing game software publishers to rely on a restricted number of markets from which to earn back their investment in the games they release. Moreover, piracy's effective pre-emption of legitimate distribution in many countries effectively serves to exacerbate the U.S. trade deficit as U.S. game publishers are unable to export their products to these markets.

Even with the high rate of piracy in many countries, ESA members are not letting the absence of an equitable intellectual property enforcement environment preempt efforts to get into these markets. Instead, they are endeavoring, against difficult odds, to introduce legitimate game product into these local markets, as they understand the importance of the availability of legitimate product in the fight against game pirates. However, such market entry efforts can only be sustained for a limited period of time without being complemented and supported by legal and enforcement regimes that deter pirate activity through the swift and effective application of meaningful penalties.

Internet Piracy

Internet piracy of game software is very damaging to the entertainment software industry as it frequently serves to accelerate the access of pirate manufacturers and replicators to the latest releases of games. Generally, interactive game piracy originates on the Internet through the activities of one or more online groups, commonly known as "warez" groups, which are usually composed of individuals spread across not only different countries but different continents. A number of warez groups exist and function with a special focus on game software products.

The pattern for a typical warez group's pirate activities is as follows: A member of the group will purchase a game the first day of its release, first thing in the morning—if they haven't already obtained a pre-release beta version. As soon as they're back home, they run a program that produces a mirror copy of the CD, perhaps a 10–15 minute process. The group member will then transmit this mirror copy, usually through a broadband line, to another person in the group, known as a "cracker." Within an hour or two of release, the cracker is hard at work breaking the technological protection measures placed on the game which, depending on his or her skill, can be completed within 12 hours or less. The cracked game is then ready for distribution via download and use without an original disk. By late evening of the release day, IRC and newsgroups are advertising the cracked game's availability to Internet users across the world. Depending on demand, the cracked game may also be sold to pirate manufacturers for anywhere from a few thousand dollars to considerably more. Thus, frequently within 24 hours of a game's release, the pirate replication factories I described earlier may be stamping out tens of thousands of illegal copies for shipment throughout the world, with thousands of additional downloadable copies of the game available on hundreds of Internet sites across the world.

Although Internet piracy has been a serious problem for several years, two technological factors have exacerbated the use of the Internet for the reproduction and distribution of pirate games: (1) the explosive growth of broadband access to the Internet and (2) the emergence and popularity of peer-to-peer (P2P) networks.

While broadband Internet communication has created tremendous opportunities for consumers to enjoy high-speed communication and entertainment, it has also been a boon to pirates. High-speed Internet has given pirates the ability to readily distribute entertainment software around the globe. As digital files of games are large (600–900 megabytes), downloading game files over dial-up access to the Internet requires days of uninterrupted connection, as dial-up permits receipt of only a small amount of digital information at a time. However, with the advent of broadband connections, download times for such files are dramatically reduced, with the ability to download entire game files in a matter of hours as opposed to days. In part, this explains why we have seen a high incidence of downloadable game files on university networks, as the great bandwidth available to students facilitates their accessing their favorite games at no cost to them. Compounding the accessibility and ease of downloading offered by broadband access has been the astronomical increase in the number of households enjoying such access across the world.

The accelerating spread of broadband access to the Internet has been paralleled by the increasing use of P2P networks by larger segments of the global population. P2P networks, such as Kazaa, eDonkey, and DirectConnect, have become active interchanges for the flow of pirate game files among network users. The use of such networks for transmission of music and movie files is rapidly expanding to include the copying and downloading of the latest pirate game releases, many of which originated in the warez group channels. Although warez group communication chan-

nels are usually tightly controlled with restricted access, it does not take long for the latest pirate game files to trickle out of these environments onto P2P networks where the versatility and efficiency of these networks fosters the rapid copying and dissemination of files among their users. In addition, over the past year, new distributed network technologies, such as BitTorrent, have further enhanced the ability of networked users to access and download pirate game files and other illegal content. Use of BitTorrent for illegal file transmissions is particularly damaging as it functions as an unusually powerful and efficient P2P system, making download times shorter.

Although pirate game files are available on a number of different Internet protocols, such the World Wide Web, ftp sites, IRC channels, auction sites and Usenet newsgroups, the incidence of game files on P2P networks has far surpassed these. In the more than two years that have passed since this committee last convened a hearing to review the global intellectual property piracy situation, our online investigators have seen astronomical growth in the incidence of illegal game files on P2P networks. In one month earlier this year, based on a limited number of game titles, our online monitoring service reported more than 477,000 new cases of P2P piracy (involving more than one million infringing files) as compared to just over 12,000 new cases on all other protocols combined.

In addition to fostering and featuring the downloading of pirate game files, there are a number of other ways in which the Internet is used to facilitate piracy of entertainment software products. The Internet is also used as an advertising vehicle for services that offer sales of pirated hard copies of disc and cartridge-based games, circumvention devices, and circumvention services. As noted above, installation of such circumvention devices in PlayStation2 and Xbox consoles allow people to obtain their pirate PlayStation and Xbox games through illegal downloads and then burn these onto CD-Rs or DVD-Rs for use in the chipped consoles.

Internet Cafés

There has also emerged another rapidly growing global trend that effectively represents a convergence of the parallel problems of hard-goods and Internet piracy. Countries throughout the world have seen an explosion in the number of Internet cafés, establishments that offer for a fee the temporary use of computers on their premises to access the Internet or any other applications resident on these computers, including game software. It is clear that the ability to play games on computers is an important attraction for these businesses as game-playing attracts a great number of consumers who may not be able to play games at home for a number of reasons. Moreover, as the computers in Internet cafés are usually connected to the Internet (frequently via a broadband connection) these offer the additional benefit of being able to play games online against other Internet users. Unfortunately, the operators of these establishments are frequently engaged in infringement themselves, either loading pirate versions of games onto their computers, or buying one legitimate copy of a game and loading that one copy onto the fifty computers in their café (instead of buying fifty legitimate copies). In addition, many café operators turn a blind eye to customers who use their facilities to commit further infringements, such as burning software and other copyrighted works onto CDs. Internet cafés are multiplying quickly in a number of countries in Asia, Eastern Europe and Central and South America. In China, there are estimated to be more than 200,000 Internet cafés in operation, many housing between 100 and 300 seats. This emerging form of piracy should be addressed by these countries at both policy and operational levels, as these cafés are likely to be, for the foreseeable future, the way that much of the world obtains access to the Internet.

III. GOVERNMENT RESPONSES TO THE PROBLEM

More than two years ago, when this committee held a hearing on the topic of global intellectual property piracy, ESA (then IDSA) presented a number of recommendations on possible government action for the committee's consideration. In addition, Senator Biden issued a report which also offered a number of recommended solutions to help address the problem. Some of these solutions have been pursued, while others have not. We think it would be useful to review all of these recommendations and offer our assessment as to which of these still have relevance and deserve the committee's continued consideration and support and which of these have been overtaken by other developments and therefore require re-examination and modification.

One of ESA's principal recommendations at that time was the renewal of the GSP trade benefit program, as, at that time, the GSP program had not been renewed, jeopardizing the trade leverage offered by the possibility withholding of GSP benefits from countries that fail to provide adequate intellectual property protection.

This concern was consistent with Senator Biden's recommendation that the U.S. government take maximum advantage of existing trade mechanisms to motivate U.S. trading partners to improve their intellectual property protection efforts. Fortunately, last year, Congress renewed the GSP program, reinstating the availability of such leverage for the U.S. government. Currently, there are a number of GSP beneficiary countries under active review which are scheduled for resolution in the coming year, including Brazil, the Dominican Republic, Kazakhstan, Lebanon, Russia and Uzbekistan. We continue to believe that the withholding of GSP benefits can serve as a primary motivator for countries to make serious efforts to reduce local intellectual property piracy and therefore should be used purposefully to obtain material improvements in the results of our trading partners' intellectual property enforcement efforts.

Another recommendation in Senator Biden's report regarding the use of free trade agreements (FTAs) to obtain country commitments to elevate their levels of intellectual property protection has proven to be prescient as the past two years have seen substantial efforts and progress achieved on this front. The U.S. has since signed free trade agreements with Singapore, Chile, Morocco, Australia and most recently Bahrain and the countries of Central America, all of which contain specific commitments for the countries to elevate their intellectual property laws and enforcement efforts to the highest levels. Although in most cases these commitments have yet to be implemented, we believe that these will have very beneficial results in the near future, particularly if the U.S. can supplement these with training and resources, as described below. These FTAs have also helped advance another of ESA's earlier recommendations regarding getting countries to adopt statutory notice-and-takedown provisions with respect to online piracy, under which Internet Service Providers (ISPs) will be subject to notices from rights holders regarding the infringing activities of their subscribers. All of the FTAs negotiated by the U.S. have included a commitment to adopt such a system, which will thereby facilitate rights holders' own efforts to try and police Internet piracy in these countries. We want to commend Chairman Lugar for all the support that he has provided to augment the efforts to negotiate these productive trade instruments.

Going forward, ESA would support efforts to negotiate an increasing number of FTAs as these will greatly accelerate important upgrades of the intellectual property protection environment in signatory countries. The increased incidence of FTAs and the improved intellectual property environments that these will produce will enhance the interest of neighboring countries to take steps to improve their legal and enforcement regimes for copyright and trademark, even in advance of negotiating an FTA with the United States, as they will want to compete for foreign investment in their local markets.

Another recommendation that was included in both ESA's hearing statement and Senator Biden's report two years ago was to increase U.S. government provision of training and resources for intellectual property enforcement to foreign countries. Improving the quantity and quality of on-the-ground enforcement efforts is a critical factor in being able to make a significant dent in both hard goods and Internet piracy. There has been good progress in this direction over the last two years. We want to thank Senator Allen for his work as the lead sponsor on a bill last year which, along with Senator Alexander, he fought for to obtain State Department funding for non-OECD (Organisation for Economic Co-operation and Development) countries to strengthen anti-piracy efforts. The Allen-Alexander Amendment, supported by Chairman Lugar and others on this committee, provided important funding for equipment and training programs for foreign law enforcement officials, including importantly judges and prosecutors, and assistance in complying with intellectual property enforcement obligations under various treaties and obligations. Senator Allen has long taken a leadership role in fighting intellectual property theft and we specifically want to applaud his efforts and those of Senator Alexander with respect to obtaining State Department funding for this purpose.

However, we believe that much more can and should be done in terms of providing such training on a systematic and rational basis. We are concerned that there seem to be different programs overseen by different agencies aimed at providing training and training materials to foreign countries' law enforcement groups operating independently of one another. We recommend that there be coordination among such programs in order to optimize the allocation of U.S. government resources for these purposes. We also recommend that U.S. government resources for training and education about intellectual property be expanded to include judges, as these individuals play a crucial role in dispensing justice with respect to intellectual property violations and are generally insulated from political or trade pressure than are other officials, making a training approach productive in elevating their understanding and appreciation of intellectual property.

IV. NEW RECOMMENDATIONS

Looking beyond the recommendations made two years ago, we would like to suggest two additional areas for the committee's consideration based on certain trends and developments that arose since that hearing. The first urges strengthening the position of USTR so that, in addition to negotiating increased commitments from trading partners regarding intellectual property protection and enforcement, it is also more completely monitoring and enforcing countries' compliance with these obligations. Our second recommendation calls for catalyzing formulation of a unitary enforcement effort by U.S. law enforcement agencies against major international syndicates which includes active involvement in investigative and enforcement operations overseas. We have great faith that this committee, under the leadership of Chairman Lugar, will understand the intended benefits of such recommendations and be able to obtain their adoption and implementation in an appropriate fashion and time frame.

A. Strengthening USTR'S Position in Monitoring/Enforcing Intellectual Property Commitments

In recent years, the USTR has done a tremendous job of successfully negotiating free trade agreements that raise intellectual property protection standards to the highest levels. However, with the increasing burden of broadening the free trade sphere, USTR has not had the resources or personnel to devote to an equally important mission: monitoring compliance with and enforcing U.S. trade law and bilateral trade agreements.

USTR relies on personnel from other federal agencies to perform its monitoring duties. Moreover, intellectual property rights issues are currently included in an office within USTR that also covers services and investment issues. Given the enormous importance of intellectual property to our economy, ESA recommends the creation of a stand-alone intellectual property office with dedicated and adequate staff to conduct multilateral and bilateral negotiations and also to ensure that our trading partners comply with their intellectual property-related obligations to the United States. Additional consideration should be given to creating a special ambassador for intellectual property and provide that official with adequate staff and resources dedicated to the enforcement of existing agreements. We can not overstate the importance of dedicating additional government resources to the objective of enforcing FTAs and other trade agreements containing commitments regarding intellectual property protection as we can not rely on most countries to fulfill their treaty obligations without such oversight.

Whatever approach is taken, the addition of new staff dedicated to enforcement of agreements will materially strengthen USTR's ability to monitor WTO/TRIPS compliance, and to fulfill the potential of the Special 301 program through more aggressive use of out-of-cycle reviews. Similarly, dedicated intellectual property staff could help ensure that the GSP program is used as effectively as possible to induce foreign nations to better protect intellectual property rights. As noted above, ESA sees reinvigoration of the GSP review process and the prospect of losing tariff-free trade benefits that reach into the billions for certain nations as one of the best incentives for countries to improve intellectual property protections.

In addition, the Special 301 process has been used to great effect by USTR in encouraging other countries to improve intellectual property protections and enforcement practices. We appreciate the Senate's continuing support of Special 301—particularly its efforts to keep it an up-to-date and powerful trade tool through improvements contained in the Senate's version of the Miscellaneous Tariff Bill that was passed by this body in early March. We urge the Senate to appoint conferees to meet with the House to move early adoption of the important legislation for the copyright industries.

B. Activating U.S. Law Enforcement Agencies Against Overseas Piracy

The U.S. Government has, in recent years, continued to elevate the priority it attaches to combating intellectual property crime. While scoring some critical successes in this area, agencies like Justice, the FBI, and Customs, despite their diligent efforts, are understandably pulled in many different directions, most recently to the war on terrorism. Moreover, the impact of these enforcement efforts has been blunted by the inability to press the campaign against pirates overseas.

In contrast, over the years, the Drug Enforcement Administration has proven how effective a focused, single-minded approach to attacking global drug production and smuggling can be, particularly when dealing with a problem which largely originates in foreign lands. We should consider a similarly focused effort on intellectual property crime. We know that there have been recent efforts to enhance coordination and cooperation among various government agencies engaged in the war on pi-

racy. However, we believe that the problem is so large and complex that it requires more than simply better coordination. Given the enormous costs to our economy from piracy, given the increasing evidence that terrorists are involved in intellectual property crimes as a way to finance their operations, and given the fact that America's copyright industries year-after-year represent more than 5 percent of the nation's GDP, serious consideration should be given not just to improved coordination and cooperation, but to pooling our government's investigative and enforcement resources into a centrally directed campaign against international pirate operations.

Moreover, the criminal organizations that are deeply involved in hard goods piracy are generally located in countries where local law enforcement officials are less willing or able to target them in any meaningful way. We believe it is time to give clear and unambiguous guidance to America's law enforcement community to pursue investigation of and enforcement against pirate syndicates operating beyond our borders when a determination has been made that local law enforcement is not up to the task. Such an approach means that America's top law enforcement agencies may need to become more actively involved in the investigative operations at the local level that are required to bring pirate enterprises to arrest and detention. At the same time, such active involvement will help establish an important foundation for local law enforcement officials from an experience and training standpoint so that they can eventually acquire the necessary skills and understanding to mount future investigative and enforcement efforts against local pirates.

V. CONCLUSION

Mr. Chairman and members of the committee, it is clear from my testimony that our industry has in the U.S. Government a strong and effective partner in the battle against global entertainment software piracy. Your committee's resolve to combat piracy is well-established. We are grateful for your commitment, especially at a time when our nation faces so many other threats to our security. But it is equally clear that the global piracy problem remains deeply entrenched, and that it directly endangers America's economic security as U.S. companies see viable potential markets closed-off due to the proliferation of pirated and counterfeit products. We need your continued help, and we appreciate the opportunity to share some ideas on additional steps that can be taken to protect America's greatest export: our creative and intellectual property. Working together, I believe we can fight piracy to protect what is one of America's most dynamic and fastest growing creative industries.

The CHAIRMAN. Thank you very much, Mr. Lowenstein.

We'll now have a period of questions by our committee, with a ten-minute limit. Let me just indicate that I know some members have prepared statements in addition to questions. Please use your ten minutes however you wish, with a statement and the questions, and we will have another round if that is required.

I'll begin the questioning by commenting that certainly each of you have attempted to answer questions that were raised in our opening statements as to the actions that ought to be taken. I want to further explore your technical expertise in two ways. First of all, Mr. Bainwol, in the music situation, you point out that the piracy in the United States—often attributed to teenagers, college students, and what have you downloading music—is rampant. We read stories each day of cases being processed against these persons. As a practical matter, there appear to be hundreds of thousands of these people, maybe millions for all we know. The Internet phenomenon that Mr. Valenti described has unleashed all sorts of situations. One of them, obviously, leaving aside piracy abroad, is piracy at home. Some of you have touched on this in other ways, which leads me to this question: Will, at some point, the industries that are represented here, in fact, adopt the necessary technical means to render this much more difficult, if not impossible, or is this simply a forlorn hope?

I raise this because Americans, with common sense, looking just at the music situation for a moment, would say this is something

that is totally out of control, despite threats, lawsuits, conspicuous convictions, and so forth. There may be a lack of moral fiber as to the fact that this is stealing that's not perceived by many of the people doing the stealing. Without there being some technical means of stopping it, it is likely to continue. Therefore, the breaking of the law, and the common feeling about that, might continue.

What can you say about this business? What sort of technical shifts, what kind of research are you doing to stop it?

Mr. BAINWOL. A variety of—I'll try to be short on this one. This is a big topic. First, I want to re-stipulate that technology really is not the problem, at the end of the day. Technology is the answer. The Internet is not our problem. In the end, the Internet is the answer, as well. But what it really does boil down to—and I'm going to talk about a societal regard for property and then the impact of these lawsuits—in order for us to succeed in what Reagan called the economy of the mind, we've got to have, as a society—whether it's policymakers, consumers, business—respect for property. It's that simple. And that ultimately is a question of parents talking to their kids, of the schools, the policymakers talking to their constituents, saying that our American economy is rooted in property rights, it's rooted in the profit motive, you've got to have respect for property. It is our comparative advantage globally, and it's a societal norm. We would have to insist on it.

Two, the lawsuits. The lawsuits have been very, very successful in terms of educating the public. A year ago, before the lawsuits were launched, roughly a third of the folks in the country knew that it was illegal to download music without authorization. Now that number has skyrocketed; it's in the 70s. So we've had this transformative impact, just in terms of awareness. That's step one.

Step two, then, is to get people to be responsive—parents talking to their kids. The students who are 17 to 23 have their value structure pretty much locked in. They fell in love with music, and became fast on the computers at a point in time when there was ambiguous information about what you could do. And so they're locked in. But the kids behind them, we've got a shot with. And really that's the hope.

Now, finally, technically. In the case of music, if you want to be a commercial pirate, there's nothing we can really do. In the case of music, with Kazaa and the other P-to-P services, if you want to go online, and we really can't stop that circumvention, so it does require personal commitment.

But the P-to-P services could use technology to make this problem go away. There is technology called simply a filter, which when the downloader says "I want a copy of some popular song," his request would go up against a database, and the database would say, "Ah, identified copyrighted song, you may not download it unless you want to pay for it." The P-to-P services could impose these filters right now. They exist. There are prototypes on the market.

So technology exists in a fashion that would help this problem, but it requires the P-to-P businesses that are profiting on theft to go legitimate.

The CHAIRMAN. What are the P-to-P businesses? Please, define this a little more.

Mr. BAINWOL. P-to-P, peer-to-peer businesses. There are a bunch around the world, but the most prominent is Kazaa, which is based in Australia and in Vanuatu. And to give you a sense of scope, there have probably been about 400 million downloads of the Kazaa application, give or take, globally. It is the most popular downloaded application on the Internet today. Four of the top ten applications on the Internet are P-to-P applications, so it is a very pervasive problem. These guys are not, by and large, located in the United States. They exist outside of our borders, and it's a very tough thing to track down.

The CHAIRMAN. Okay. Well, then, we've gotten outside of our borders, and, as you're saying, now technically the music can be downloaded. If a company doesn't want to download it, it can stop it, as you're suggesting, but if it does want to, and it's operating in Australia, they proceed. And so, in essence, there is no technical means to stop this. You have moral suasion by parents in the United States, and you're all suggesting that we send law enforcement people from the United States, to these countries. We try to work out arrangements, I gather, in which American law enforcement supplements what may not be happening in terms of law enforcement in these countries. Now, they may or may not accept that, but at least that's the suggestion as to how you proceed vigorously: you have American law enforcement people going after people in other countries.

Now, my hope always was that something short of that is possible, because, as a practical matter, it would appear to me that in some countries, American law enforcement people will not be acceptable, will not be welcome. So then—that's why we have treaties.

Now, what are the implications, let's say, of taking away GSP authority, as some of you have suggested, as a sanction? What other industries are affected? In other words, in terms of the net sum for American business, are some other people victims of the fact that the United States is retaliating in order to solve the intellectual property situation? Anyone have a comment on that?

Mr. LOWENSTEIN. I don't know specifically. I think you'd have to look on a country-by-country basis and, obviously, weigh a variety geopolitical concerns of this country, as you look at it. I think that my message—our message to you is that it's a tool. It can't be a blunderbuss. It needs to be used with sensitivity and delicacy, but it is a very effective way to get people's attention. One would hope that it wouldn't have to be used, at the end, because its mere presence being waved in front of a country will bring some religion to the process.

If I could quickly add one other—

The CHAIRMAN. Yes.

Mr. LOWENSTEIN (continuing). —point to your comment about technology, because I think it's very important. And I think our industry is perhaps, unlike our colleagues here, an industry that has spent a huge amount of time looking at technological protection as a way to protect our intellectual property. If you look at a typical video-game console by Sony or Microsoft or Nintendo, the technological protection is there. It's very advanced. It's built into the hardware. It's an access control. The problem is, there are devices

that circumvent that technological protection. They're called mod chips. There are other kinds of things that do it. And they're widely available on the Internet. And these circumvention devices are yet another tool that the international pirate community develops, markets, and distributes to create piracy.

So technology is—and we're developing digital-rights management tools, as is every industry on this panel—but it is not, in and of itself, the silver bullet, because the pirates are always jumping a step ahead.

The CHAIRMAN. One of the things that you've suggested is diplomacy. You've mentioned Japan as a situation that's had improvement. Is it possible that—and you're all suggesting that it is, perhaps—that the nations of the world that have the most at stake in all of this, in fact, might come together and decide that it's in their national interest to do the job domestically in their own countries, as well as allowing for cooperation of police from the United States, or what have you, to come through there, and perhaps to see how many countries can be signed up to this? You know, it occurs to me, otherwise, you would have a situation in which, even in Japan, you would go from 64 percent to 35 percent or so forth. That's still a huge amount of piracy, despite improvement and the pretty good cooperation in a country that sees its own interests there. How should diplomacy proceed?

Mr. HOLLEYMAN. Mr. Chairman, if I could comment on that, I think that, you know, in Japan, we've seen a couple of factors. We've seen a lot of public awareness, we've seen some effective enforcement, and use of criminal prosecution as part of the tool in Japan. In many of the high-piracy markets we see today—China, for example—there are no criminal tools that can be used against unauthorized copying of business software in a corporate environment. And so part of what we have to do is to work with our allies to get those tools in place, and I think we have leverage through the WTO to do that.

Secondly, even in places like Japan, there are no statutory damages, predetermined damages like we have in U.S. law. The U.S. law provides a penalty of up to \$150,000 per work infringed, and we have been successful in many of our recent FTAs in getting our allies to include similar requirements appropriate to their own laws. Japan is lacking that. So when I talked to the Secretary General last week, I said, "If you want to get your piracy rate down even further, one of the things you need to look at is putting those type of statutory damages in place."

So I think there are a lot of examples that have worked well in the U.S. that can work with our trading partners in trying to instill those values.

Mr. VALENTI. Mr. Chairman?

The CHAIRMAN. Really provide model language, model statutes—

Yes, Mr. Valenti?

Mr. VALENTI. Can I just add to that? I think that what is being done in the FTAs is a good example of diplomacy. For example, the USTR has concluded, and Congress has approved, the Chile and Singapore FTAs. Morocco and Australia are awaiting approval. Enclosed in these agreements are first-class protections for intellec-

tual property. And the more of these FTAs we can do, then we establish in law the protective embrace, and that's very, very important.

The second thing that's happening is that more and more countries, where there is—and I'm speaking now for the movie industry—where there is a visual storytelling industry, they are now coming to the conclusion that pirates are equal-opportunity thieves. They steal everything that's popular, including their own films. For example, I know that the government of France, led by President Chirac—because two weeks ago, I was in France, and there with the Cultural Minister of France and representatives from India and Russia and China—France is leading now an anti-intellectual property piracy effort in Europe, and it's trying, if you can believe this, for the first time to join hip and thigh with the United States in trying to get this issue of piracy on the G8 agenda this weekend. So I think there is some progress there in those countries that have a considerable stake in protecting their own intellectual property.

The CHAIRMAN. Thank you.

Senator Boxer?

Senator BOXER. Thank you so much, Mr. Chairman. I couldn't be more grateful than I am for you doing this. It's such an important issue for California and for the country. And as Mr. Valenti pointed out, it's an emerging issue for all countries, and I'm going to touch on that in a minute.

Mr. Chairman, if you had called us together today because there was an outbreak of thievery of American bicycles that were being stolen abroad, people breaking into wherever there were American bicycles, we would just say, "Well, why are we hearing that now? This is clearly a law enforcement issue, and let's get those people and put them behind bars," and it wouldn't be any question. Well, when you deal with the intellectual property, you have to continue—and I hate to use the word "educate," because I'm not—that's not my job—but we need to explain and understand, and the whole world has to understand, this is thievery. In a way, it's even deeper thievery than stealing one bike. You steal one bike, that's it. You steal a movie, you steal a record album, you can make millions of copies, so you're stealing a million bikes, if you will. So this is really a very, very big issue for us.

Now, I'm passionate about this issue because I see what is already happening, that we're already losing jobs, that we're already suffering, and that when you look at our country today, we've got twin deficits. We've got a trade deficit that is enormous, and, it seems to me—here it is, in 2003, 535.7 billion in U.S. merchandise trade deficit. We cannot afford to have our exports stolen. This is absolutely the worst thing that can happen, and that's why I'm so grateful to you.

And Mr. Valenti put out some of the numbers. I'll put these numbers on your plate again. Copyright-based industries—that's motion pictures, sound recordings, software, books, and printed material—accounted for 5 percent of GDP in 2001, adding 531 billion to the U.S. economy, employed 4.7 million people—4.7 million people—and responsible for exports of 89 billion. So this is not some side issue. This is an issue that's pretty central to America as, you know, one of the brightest spots on the globe.

I have here a couple of examples I want to just pass it over—my staff—Danny, would you do this? Would you—this is the steal of a Mariah Carey disc. And this is a Chinese singer, Hin. Anyway, the point is—

(Laughter.)

Senator BOXER (continuing). —we're getting—he's very popular in China. So the point that Jack Valenti made is well taken. You know, now we're beginning to see the pirates steal the Chinese works.

So what's the point of all this? We—us, this committee, State Department, trade office—have to take this on, we have to persuade the people in the other parts of the world—and it looks as if France is getting it—that just because now we're the ones taking the brunt of it, they're going to be the ones getting the brunt of it.

And so, Mr. Chairman, I think what this committee can do, in a bipartisan way, is to make sure that the discussion of intellectual property theft is—has got to move up on the agenda of our international relations. We have this trade deficit. It's enormous. We have a lot of leverage over these countries. My view is, you don't crack down on stealing, you know, American property, then you're going to have to face some repercussions. You know, it's enough to say, well, we're just going to sit around in these nice State Department rooms and have a soft conversation. I'm beyond that point. I think we just can't see it.

I've heard, from the music people, that they're already turning away bright, new artists—they can't back them—because this is beginning to hurt the music industry. They can't take a chance, because they're losing revenues.

So I think that our panel was exceedingly strong, but very polite, and I think we need to really listen to what they're saying in their nice way, and we have to see it for what it is, which is thieving of our property here, of our people's property, and we need to put this in a much higher level, in terms of State Department affairs.

I have a question for Mr. Valenti. He touched on this. But I think the importance of making the connection between the criminal organizations and other countries that profit off this intellectual property theft—could you expand on that and make the point that there is a connection here, and that's another reason why we should tell our foreign friends that they're looking for trouble?

Mr. VALENTI. Senator Boxer, police forces over the world, including Interpol, have told us that there is—that criminal organizations really control most of the vast majority of theft that's going on abroad now, and that there is some evidence—I don't know how tenuous or non-tenuous—that some of this money is going to fund terrorist organizations. I cannot specify that. I can only tell you what we have been told and do, in part, believe.

Senator BOXER. Well, I think that's exceedingly important information.

Mr. Holleyman, from the Business Software Alliance—and Senator Lugar tried to get to this point, but there are a number of countries who are not enforcing the laws they have the books—could you give us a sense of this? Because this is where I think we cannot continue to have these relations with countries who are not enforcing the laws that protect our intellectual property rights.

Could you kind of put that into perspective for us? How prevalent is that?

Mr. HOLLEYMAN. Well, I can give you a couple of examples, Senator. Thank you for your question.

Brazil's been mentioned by several of my colleagues this morning. You know, there has been only one conviction for software piracy in Brazil in the past six years. But, as Senator Biden mentioned earlier, and as the Chairman mentioned in his opening statement, there was recently a delegation of members of congress from Brazil who spent four days in the U.S. They have returned home and are very committed to making progress. This is an example of the type of engagement and diplomacy that is extremely important. They want to do the right thing, and I think their visit to the U.S. helped give them the tools to do it.

I'll mention a market that has not come up this morning, which is India—thriving market for software. There are good laws in place in India. But, at the same time, we lost \$342 million in 2002 due to piracy in India, because there's an ineffective civil court system, criminal enforcement at the state level is inconsistent and rarely leads to prosecutions, and for the software industry we have never had a conviction for software piracy in India. So even in markets like India, where we do have close ties with the Indian software industry and are very aggressive in trying to educate, we need more pressure from the U.S. Government to get there.

Senator BOXER. Well, I'm glad you gave us that example, because here we have a circumstance in America—we have a lot of outsourcing of jobs. I'm not going to get into whether it's good, bad, or indifferent. I guess if your job is outsourced, it's bad. But we won't get into the macro-picture of that. But here we have that circumstance going on, and, you know, I love the—I have the most wonderful Indo-American constituents in my state. The fact is, they've got to crack down on this. They're getting rewards from our economy. The least they can do is crack down when we see a problem.

And I would like to ask Mr. Bainwol a question on peer-to-peer. I've got a lot of problems with peer-to-peer because—and we don't have too much time here, but within my time I will tell you, we have an alarming rate of child pornography being distributed on peer-to-peer, and we are taking that up in the Commerce Committee, as well as in Judiciary. But, that aside, do you find that people are using these networks to download music, and then sell it in counterfeit form worldwide?

Mr. BAINWOL. I can't speak to whether they download it from the Internet and then counterfeit it. They certainly could. I mean, once you've captured the property, you can burn it, and you can sell it. So my presumption is, that occurs. But it's hard to document.

I would go back to the point you made, though, before, and I just want to highlight a thought. We've talked a lot about the economics here of the impact of cannibalizing a market, but there's a huge cultural question here, as well. When the Brazil local repertory market goes to pot because there's no investment, it means there's less culture in Brazil that's local. We have the same problem here. So I'd just like to throw out the notion that the impact here of piracy is both economic and very severe, but also cultural.

Senator BOXER. Thank you.

The last question I have is to Mr. Lowenstein. Regarding the upcoming trade negotiations that the administration is pursuing, which takes the highest priority for your organization—what takes the highest priority for your organization as it relates to intellectual property rights?

Mr. LOWENSTEIN. Well, I think, for us, it's—probably the most critical element to include in those FTAs is strong language regarding anti-circumvention devices. As you know, we have the Digital Millennium Copyright Act here in this country which outlaws the trafficking, manufacturing, and distribution of devices that circumvent copyright protections. It is absolutely critical that these free-trade agreements have explicit and strong language with respect to outlawing similar devices. And, secondly, that these agreements have strong so-called notice and takedown provisions—again, similar to what we have in our DMC Act.

Senator BOXER. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Senator Boxer.

Senator Allen?

Senator ALLEN. Thank you, Mr. Chairman, so very much for holding this hearing on this very important subject, and I appreciate your leadership and knowledge on this matter, which is going to take a protracted perseverance in a variety of fronts because it is an issue, in listening to the testimony of our four witnesses here, all very articulate, knowledgeable, and great insight—it's going to take awhile to get it through, and we're going to have to be looking at better ways and improved ways of enforcing these laws and these principles, the property-rights principles, not just what—the emerging developing countries, but others that are very developed and don't seem to find any problem with taking this property. And whether it's a copyrighted work or intellectual property in a different sense, the reality is, it's harming jobs here in this country, it's harming innovation, it's harming research and development into new creative methods, and it's harming our overall competitiveness, as well.

Serving on this committee, Mr. Chairman, as well as the Commerce Committee, I'm aware of this issue from two different aspects, and I'm glad to hear all our witnesses not blame technology for it, or blame the Internet for this. This sort of piracy and copyrighted materials being distributed illegally has gone around since the days of the tape recorders, and then there was the VCRs, then there was the DVDs, and CD burners still are fairly popular, as well as the peer-to-peer networks that are used for reproducing, stealing, and distributing copyrighted works. That's a long-term problem.

I'll not go into all the costs and impacts. It's been said before. What I want to look at here is what we can do more to make sure that the laws are enforced. Each one of you all have a different aspect of concerns, and obviously working with other colleagues on this committee we were able to get \$5 million to help out the other countries in the enforcement of their laws, whether to pass laws—but it's one thing to pass laws, but the key is enforce them, show will. These other governments need to work with the technology

community, with the content producers, and so forth, but they need to have a sincere will to enforce those laws. And some of them clearly don't rightly care about it. There are other priorities for them.

Listening to the stories on China, heck, you can't even get legal products into China. It's restricted. The only way they're going to get motion pictures are from those who have stolen or pirated or illegally copyrighted production. And then there's also closed markets and so forth in other areas, as well.

The key—and a lot of the questions that I was going to ask have been asked already—we need to have the necessary resources in place. That's clear. There are ways that diplomacy matters. There are technical deterrents to it—watermarks, for example—on some of y'all's products.

An interesting idea was broached, and that has to do with these GSPs, using that as an enforcement tool. Listening to all four of our witnesses, who represent hundreds of thousands, if not millions, of jobs, but clearly billions of dollars of investment and revenue, the key violators seem to be in the countries of China, Russia, and Brazil. Not to say others are not violators, or allowing these laws to be broken or this property to be stolen, or the thievery. Using GSPs—if any of you all, or all of you all, will please comment on, as a practical matter, and just share with us and the American people—would these preferences—would the GSPs, which stands for Generalized System of Preferences, which extends duty-free treatment to certain products that are imported from designated countries—how will this work? Because I think that we need to look at ways of making sure the penalties are great. If all they're getting is a slap on the hand, just like drug dealers—drug dealers, unless you get after their assets, forfeit their ill-gotten gains, sure, you ought to put them in prison, but if you get after the—you know, and seize those yachts, art objects, jewelry, bank accounts, everything from it, the same—I'm not saying it's exactly the same, but the point is, is if very few are caught, and, when they are caught, they get a slap on the wrist, this is not a deterrent. Enforcement matters. Penalties matter when trying to deter and defeat and, thereby, prevent this kind of activity.

So any ideas that you have on increasing penalties, what are those penalties—this means our diplomats need to be encouraging those countries to pass such laws, then enforce the laws. But if they do not, maybe these GSPs are an approach. But I'd like to know what the full implications are if you take away those preferences, because there may be consumers in this country who count on that, and that could, in an inadvertent way—or indirectly end up hurting our economy in a different way. It may punish those countries, but it may somehow hurt consumers here. But maybe not.

So some of you all brought that up—Mitch and others—so if you all could comment on using any ideas on specifics, enforcements and also on, in particular, on using the GSPs.

Mr. VALENTI. I'll say a word, and then Mitch could respond.

The GSPs, of course, is an enticing target. The problem is, from time to time you do collide with geopolitical interests that sometimes are antagonistic to what we're trying to do in the GSPs. And,

number two, you pointed out quite accurately that you have some repercussions back here in this country. But Russia, Brazil, Pakistan, other countries like that where the GSPs are very much alive, it could be a useful weapon. But it is not an easy one to do.

Mr. LOWENSTEIN. Senator Allen, let me—I said earlier, you know, I think the GSPs are obviously a very aggressive tool, and they need to be used very carefully in a very targeted way. But they certainly need to be in our arsenal. But let me give you another thing that relates to local law.

In Hong Kong, they have an organized crime statute. It's similar to our RICO statute. Very few of these other countries, where we have major criminal syndicates operating, have similar statutes. So one thing we ought to be looking at in our negotiations and in our bilateral discussions with these countries is making sure that they, in fact, put on their books the necessary enforcement tools, legal tools, that allow them to go at the criminal syndicates. So that's one very specific example where, in many cases, that you've just referred to—the seizing of assets and seizing of homes and so forth—in many of these countries, they don't have that legal authority. And so we need to give it to them, and then, of course, the next step is to encourage them to use it. So there's a very specific example, short of, you know, a unilateral termination of GSP benefits to consider.

Senator ALLEN. Any other comments?

Mr. BAINWOL. I'd just simply note that, for Russia and Brazil, the GSP decision is ripe, and so we'll all be watching that carefully over the next few weeks. And I would also note that there is some latitude on the part of the administration to treat this with nuance. You can revoke in whole or in part. And so the impact is really, I think, a function of how you choose to exercise that authority.

Senator ALLEN. I would think that if it is done in a nuanced way—but I'm not saying that you'd have any one of them that doesn't deserve to have it revoked partially or for certain products—but I do think that if we're going to be serious about this as a country, and not just talk about it, and not just debate about it and expend money—obviously, with the five million in the last measure that the Chairman was very helpful to us all on—that those, sort of, enforcement measures does send a message to others that this is not just talk. Once in awhile you actually do have to carry out a sentence, so to speak, as a deterrent to criminal behavior.

Mr. Holleyman?

Mr. HOLLEYMAN. Sir, if I could add a comment, I think that with GSP, like the special 301 provisions, the goal is to not actually have to invoke sanctions or to withdraw those benefits, but use that as one of the tools in our arsenal. Also, the bilateral engagement that we're involved in as a country is extremely important. I know that Secretary Evans is heading to China later this month to continue part of the discussions as part of the JCCT with Vice Premier Wu Yi and others. There are some critical issues in China where we've made some progress using the 301 provisions in the past, but unfortunately, we see that progress being threatened. For business software, for example, the single best market in China right now is government agencies. But the Chinese Government is

considering a proposal that would require that Chinese government agencies buy only Chinese business software. So in what is the most lucrative market for our companies in China now, in a very tough market, there's the threat that this market is going to be taken away from us. And I know that that's one of the issues that Secretary Evans is going to be talking about.

Mr. LOWENSTEIN. Senator Allen, if I could just add one last very quick point, I think you're absolutely right, at some point the authority needs to be exercised. It's like having a child and threatening to ground them over and over and over, and then you always find a reason not to, and pretty soon they figure out there's no consequences. I think if you do it once, a lot of other countries are going to get the message.

Senator ALLEN. Well, some countries may take more than once, too.

Thank you, gentlemen. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Allen.

Let me just mention that I received word that our roll-call vote at 11:30 on the commemoration resolution for President Reagan will require that Senators be in their seats to cast that vote. That means, as a practical matter—and I ask this in equity to everybody—that we conclude the hearing a moment or two before 11:30 so that Senators may be in their seats. Now, we have four Senators who are still to be heard, so I'm going to ask your tolerance to cut the question period down to eight minutes. In fairness, Senator Nelson, I am going to call on the three Senators who have been here for a while, and then on yourself, and hopefully each one of us will have had a chance to ask our questions and to be present for the roll-call vote.

Senator Voinovich?

Senator VOINOVICH. Thank you very much. I'm glad to be here today, and I'm glad you're holding this hearing on this, because I've been concerned about this issue since I have been in the United States Senate. As Chairman of the Oversight of Government Management, Federal Workforce and the District of Columbia of the Committee on Governmental Affairs, I've had hearings in 2002, entitled "Vital Assets: Human Capital in the Federal Economic Regulatory Agencies"; on December 9, 2003, "Fair or Fowl: The Challenge of Negotiating, Monitoring, and Enforcing U.S. Trade Laws"; April 20, 2004, "Pirates of the 21st Century, the Curse of the Black Market."

I happen to believe that in terms of the global marketplace, if you look at our competitors in terms of the fact that they have lower labor costs, their companies don't have healthcare costs, they don't have to comply with environmental regulations, OSHA laws, and similar regulatory burdens, about the only thing left for us to compete in that global marketplace, and our edge, is in intellectual property rights. And if they can destroy those, we're finished in terms of competing in that marketplace.

The last hearing I had, I had several witnesses there, and I asked them, What kind of help are you getting from the United States Government? These were manufacturers. One said, "We're in China today. We spent \$250,000 trying to protect ourselves."

And then a small business said, from Mansfield, Ohio, a little manufacturer said, "I get absolutely no help."

And my observation is, we don't have our act together. I called Secretary of Commerce Don Evans, and I said, "What are you doing about this?" And he said, "Well, you know, have 'em call me." I said, "They shouldn't have to call you; there ought to be some mechanism in place that deals with intellectual property violations."

But if you think about it, we've got the USTR, we have Customs, Department of Commerce, State Department, law enforcement agencies. And, Mr. Lowenstein, you were talking about pooling. But the question I really have is, Are we organized properly in order to do something about this problem, or is it so split up that we're never going to get anywhere? And Senator Allen was talking about the Chinese. I was, in 1995, in China talking about intellectual property rights. All you've got to do is just look at the record of China. They say they're going to do it, then they don't; we threaten them, they don't do it; we threaten them, and it just goes on and on, to extent that I don't think they really believe that we're serious.

And so I'd like your opinion on, Are we organized properly and do we have the capacity—the GAO said the Department of Commerce doesn't have the number of people and the quality of people to get the job done. The USTR has had 200 people for the last ten years. Is that enough, with Ambassador Zoellick making all these trade agreements? I mean, it just seems to me like we aren't organized to get the job done.

Mr. LOWENSTEIN. Senator Voinovich, I think you hit on a really critical point here, and I think it's a very—it's not an easy answer. I mean, I think clearly some aspects, some agencies of the government are very focused on this and are trying to do a very good job, and are doing a very good job. We just had the very effective Operation Fastlink operation that the Justice Department, the FBI, worked on with respect to Internet piracy. But I do believe that you're absolutely right that they're—and what I talked about in my testimony—the importance at USTR, where they actually—a lot of their monitoring and enforcement function is a shared function, and we need to centralize that within USTR so that there are people who come to work every day at USTR who have nothing else to do but figure out how do we monitor and enforce the agreements that our country has entered into.

Senator VOINOVICH. Okay, but USTR's answer to me when I asked them the same question is, "It's all right. It's working." And you're telling me it's not working.

Mr. LOWENSTEIN. Well, I'm telling you that USTR does a great job negotiating agreements, and I think they make a tremendous effort to monitor those agreements through the 301 process and so forth, but I don't think there's any question that more can be done, and it is a lack of resources, not a lack of will. And I absolutely believe that, on a government-wide basis—again, I'm focused right now more on the hard-goods piracy problem, the organized-crime piracy problem, and that's where I think, as a nation and as a government, we need to collectively pool these resources and really target them. That's what we've done with drug enforcement, and

it's been very effective. I'm not saying we need a DEA for intellectual property. We have a lot of assets within the government. We need to make sure they're talking together, we need to make sure they're working cooperatively together, and we need to make sure they're aimed at the same set of problems.

Senator VOINOVICH. Are we organized properly? Do we have the resources to get the job done?

Mr. HOLLEYMAN. Sir, I think that the effectiveness of USTR and our negotiators, as a team, over the years has been the single biggest reason why piracy rates for business software have declined from 70-something-percent of the global market pirated a little more than a decade ago to 40 percent today. But 40 percent is, of course, an outrageously high level of theft. So we do support efforts to add additional resources, to ensure that existing coordinating mechanisms within the Federal Government work. The additional dollars devoted to helping foreign officials train their law enforcement and their judges, I think, is critical. And that does not always mean that we have to have U.S. people stationed on the ground forever in those countries, but to train them adequately.

And, finally, I would commend the efforts in the U.S. over the past several years to ensure that the Justice Department here has, for our domestic law enforcement, dedicated funds that have been used to deploy in reducing piracy, because that, then, is the example that I can finally take abroad as an example of what our own government is doing.

Senator VOINOVICH. Mitch?

Mr. BAINWOL. I speak from the vantage point of months, not years. But my perspective is that this is more a question of resource than structure. And if we're serious about our becoming an economy of mind, we have to make an investment that is consistent with that comparative strength that we have.

Senator VOINOVICH. Jack, you've been around awhile, what do you think?

Mr. VALENTI. I think that we do need some more resources. We're up against something—for example, in the FBI, U.S. Attorneys, they're so strained to the pencil line now because of terrorists, that they haven't the resources to devote to anti-piracy and putting people in jail and—convicting them first, of course, and then putting them in jail.

(Laughter.)

Mr. VALENTI. That's Judge Roy Bean justice I was just talking about earlier.

I think that's very critical, and I don't know what you can do about that because of these strains. I do believe that the USTR is a small group of people. I think they're doing a superlative job, but I think they could use more resources. I think that's needed.

And, second, I think there needs to be, within the State Department itself, more resources. For example, somebody mentioned training. There has to be somewhere out of our own embassies that people who are expert, who are knowledgeable, who are professional in this area, where you can train jurists, prosecutors, and others. What is lacking right now, Senator, is the lack of resolve and political will to arrest people, try them, and then put them in

jail. Very few—very few—jail sentences are meted out anywhere in the world.

Senator VOINOVICH. Well, I can tell you this, this is a threat to the economy of the United States—

Mr. VALENTI. It is.

Senator VOINOVICH (continuing). —of America. And we have the threat of terrorism, but our economy is in jeopardy today. We're in a new marketplace, a new global marketplace where we can get away with some of the stuff that we were able to get away with in the past because we haven't done our enforcement, but we'd better get it pretty quick or we're going to see this economy of ours start to really shrink.

Mr. VALENTI. Let me just add one thing that I didn't mention here, Mr. Chairman, Senator. What's going on in the technology world is both amazing and frightening. I visited the—in October—the Cal Tech labs, their famous labs. And there, Dr. Newman, in the lab, told me of an experiment conducted some months earlier where Cal Tech brought down a DVD-quality movie from the Internet in five seconds. Internet II, which is a consortium of scientists headed by Dr. Molly Broad, the President of the University of North Carolina, has done an experiment. They sent 6.7 gigabytes, which is one-third larger than a non-compressed DVD, halfway around the world, 12,500 miles, in one minute. Now, within 18 months to two years, these experiments will be in the marketplace, and I dare not want to consider, unless we have in place the kind of technological rebuttals that are required, when you can bring down a movie—forget five seconds or one minute—five minutes, six minutes, we'll have a dark, new cloud over all of our future.

The CHAIRMAN. Thank you very much, Senator Voinovich.

Senator Coleman?

Senator COLEMAN. Thank you, Mr. Chairman. And, again, thank you for your leadership. This is an issue that's been a great concern. The Permanent Subcommittee of Investigation, which I chair, has been looking into the whole issue of digital downloading, and this is important.

I want to associate myself with the comments of Mr. Voinovich regarding the impact this has on America's global competitiveness. We're not going to beat folks by low wages. That's not what we're about. I was in Mexico at a conference not too long ago with the Mexican foreign minister and others. The issue was raised—concerns were raised—about the impact on Mexico of low wages in China—I mean, on their economy. We will succeed through our ability to be innovative, be creative, and intellectual property is at the core of that. And I'm an optimist. I think these trade agreements create great opportunity, and the advance in technology creates great opportunity, but recognize the challenges.

How do we get our arms around this? We could be so daunted by the speed at which technology moves and the slowness at which legislation moves that we might throw up our hands, but I don't want to do that.

If I can divide it into two parts here and then lay out a question. One, clearly on the issue of hard-disc piracy, we're talking about an issue with ties to criminal organizations the potential for support of international terrorism. I was just recently overseas, and

you walk out on the street, and there, laid out in cloth after cloth are all the newest movies, and they're right there. And they're not individual purveyors, they're not all individuals—I clearly there are some connecting links there.

I want to applaud Mr. Bainwol for his very specific recommendations, both by way of the countries in question as well as to us. I think we have to use the concern for GSPs and use that as a tool to say, “Hey, if you don't create that environment”—and I believe one of the tests was—they talked about piracy flourishes in friendly host countries, and what we have to do is say that we will—if you are a friendly host country, then you are somehow hurting your relationship with the United States, and we have to deal with that. And I would hope, then, that we would then coordinate the uses of law enforcement. We have some differing agreements about the law enforcement in this country and whether they should be involved civilly in investigating these areas, but I think there's no disagreement that DEA and FBI and all the various range of law enforcement that have ties overseas should be coordinating their efforts to focus on making it clear that those host countries are no longer going to be friendly host countries and we need to support them in that.

So I think we can all agree on that, and I hope that we find a way to move forward aggressively and quickly because the moment is coming; the window of opportunity, as technology changes, to handle this gets tougher and tougher.

The question I would ask, though, as I look at some of the other issues, and perhaps individual use, which is still certainly a huge problem, you know, are we feeding the beast? We have, you know, production of CD burners that goes way beyond any legitimate use. We have production of blank CDs that far exceeds legitimate use. What do we do about that? It's as if we're turning—we understand the P-to-P issue, we're dealing with that, we're talking about it. I hear very little discussion about that. Very little discussion. It's as if we turn a blind eye to something that we know is a problem.

I'll add to that. I can physically put my arm around a blank CD. I can't physically put my arm around new MP3 technology, which we applaud, and we celebrate. I've got MP3, my wife has one, and my son has one, and one's got iTunes, and I've got Rio, and it's great. On the other hand, we clearly have—are creating, through technology, opportunities to have access to stuff in which there's almost no way you can stop folks from getting it.

So I guess my question is—and maybe it goes to the hardware manufacturers and others—but are there things that we should be doing—is there a moral message—we're talking about giving it to kids—is there a moral message to manufacturers and is there something stronger than our moral message to manufacturers to say, “Hey, you're facilitating—clearly what you're doing is facilitating the illegal spread of otherwise protected materials?” How do we approach that?

Mr. Holleyman?

Mr. HOLLEYMAN. Sir, if I can comment on that. Personal computer software has always been digital, so many of the problems that my colleagues are encountering, and it's growing in the software industry, which is digital piracy, is something we've encoun-

tered from the very beginning. Every personal computer is a software-copying machine.

We do believe that, even with that, we can make substantial progress in reducing levels of software piracy, and the history of our industry has shown that we can make that progress. So we don't think that there's a simple, single technological solution to the problem. We think there are a variety of mechanisms that will be deployed in the marketplace, like our companies are using, that are very simple to use, product-activation features that will make it harder for most customers to inadvertently make an unauthorized copy of their software or their other products. None of that, however, will stop the determined organized criminals who want to be the counterfeiters, and that's where I think we really have to look to law enforcement and other solutions, not the technological solutions.

Mr. BAINWOL. I'd simply add that—and we've spent some time talking about this—and it's a tricky question. I don't know that it's just technology, and I certainly don't want to blame CD burners. It makes the problem more difficult, but it's not the burner's—you know, it's not the hardware.

I think, at the end of the day, it all boils down to whether or not, as a society, we respect property, and that's a message that needs to go from parents to kids and from policymakers to constituents, and it boils down to that central truism.

Mr. LOWENSTEIN. I would say that sometimes it is the hardware. I mean, there are devices out there that have no other legitimate purpose but to bypass copy protection or steal intellectual property. And I think we need to acknowledge that.

I also would note that in our industry, as Robert has talked about business software, many of our companies are experimenting with all manner of digital rights management tools that are designed to provide additional layers of protection in addition to whatever encryption is built into the hardware or the software. So there isn't—as I said earlier, there's no silver bullet to the issue, and I think that, you know, there are devices that may, on the surface, facilitate piracy. There may be ways that they can be dealt with through appropriate technological protection measures, and I just think we need to find a balance.

Senator COLEMAN. In one of them, we took—I think in your tests, it was the written test—but I'm not sure whether you or Mr. Holleyman talked about P-to-P and said, on the one hand, clearly it's being used as a vehicle to facilitate illegal transfer of copyrighted material; on the other hand, it's important technology, and we should be very careful about restraining that technology, and somehow figure out a way to distinguish between the illegitimate use, and put brakes on that that, at the same time, make sure that we don't, you know, put shackles around the legs of great technological opportunity.

Mr. BAINWOL. Yeah, on that point, though, I think you do need to look at how services and hardware are used. In the case of P-to-P, if you look at the transactions that go across these networks, infringing use is probably in the high 1990s. So P-to-P as a technology is an efficient, impressive tool. But we should recognize that it's been hijacked virtually completely.

Mr. VALENTI. I think that—Mitch said it earlier—the P-to-P, peer-to-peer, is where the problem is right now in this country and around the world. A federal judge has already said that—for example, that Kazaa is not infringing, because it's software, it's not telling anybody to do anything. People use it. We are appealing that decision, of course, and it—but that needs to be clarified. But there are ways, very easily, I think—Mitch talked about it earlier—with filtering mechanisms in the peer-to-peer, forcing them to use this, and, thereby, saying all non-infringing use, we need to glorify it, let it reign. But for infringing uses, you must do this.

Now, I see—I don't understand why that can't be—why the Congress can't deal with that, Senator, and make that a part of the P-to-P experience. You put filters on, you filter out all copyrighted material that is infringing. But on non-infringing, let the gates open, and everybody enjoy it. And that's one way, I think, that—a very simple way to cut off these intrusions on private property.

Senator COLEMAN. Thank you.

The CHAIRMAN. Thank you very much, Senator Coleman.

Senator NELSON?

Senator NELSON. Thank you, Mr. Chairman.

In addition to all of these suggestions today that we need to find some vehicle to help the industry stop the pirating of intellectual property, there were a couple of comments in a couple of your testimony that I want to pick up on, and that is the right opportunity for terrorist financing through the piracy of intellectual property.

I was struck, Mr. Chairman, the other day, in the paper, to find out that the selling of tobacco products—buying cigarettes in one state cheaply, selling them in another state where you can sell them for a lot more, and the profits are now thought to be going into the terrorist coffers. Indeed, as a matter of fact, Interpol has come out with a concern about the stealing of intellectual property and the raising of vast funds for terrorists by the sale of knock-off goods—it being the steal of a patent and replicating the Gucci bag or all—I don't know all these terms for all of these things—and yet there's a huge amount of money to be made there. We think of just terrorists making money out of the drug trade, and yet the amounts made by the sale of knock-off items, which is an infringement of intellectual property rights, is so far much more than what is made in the drug trade that more and more as we try to shut the avenues of financing for terrorists, they're going to continually go into this.

So, Mr. Valenti and also Mr. Lowenstein, both of you mentioned it in your prepared statements, this piracy as a source of terrorist financing, I wish you would pick up on that.

Mr. VALENTI. All right, sir. I have before me, which I was going to send to the committee, and will send immediately—this is probably the report that you're referring to, Senator, and—by Ronald K. Noble of the International Criminal Police Organization, Interpol, the links between intellectual property crime and terrorist financing, and it goes into rather—detail and specifics. For example, they estimate that in ten years, al Qaeda received between \$300 and \$500 million from intellectual property crime. And it cites country by country. I'm going to pass this along to the committee.

[The information referred to follows:]

REPORT SUBMITTED BY THE INTERNATIONAL CRIMINAL POLICE ORGANIZATION,
INTERPOL

THE LINKS BETWEEN INTELLECTUAL PROPERTY CRIME AND TERRORIST FINANCING

by *Ronald K. Noble*, Secretary General of INTERPOL

6TH APRIL 2004

Introduction

Intellectual Property Crime (IPC) is the counterfeiting or pirating of goods for sale where the consent of the rightsholder has not been obtained. Terrorist financing is the generation of funds via licit or illicit means that are then remitted to a terrorist organization or its front organization via formal or informal financial channels. These funds may be used for either the running costs of the organization or to carry out attacks.

Scope and Purpose

This report seeks to examine the links between IPC and the financing of terrorist organizations. It examines what is known to the International Criminal Police Organization (Interpol).

The report is produced for the 58th Meeting of the Transatlantic Dialogue held in Dublin, Republic of Ireland on 6th April 2004.

It should be read in conjunction with the public record of testimony provided by Ronald K. Noble, Secretary General of Interpol, to the House Committee on International Relations, One hundred Eighth Congress, on 16th July 2003.

The purpose of this report is to provide an overview of developments since July 2003.

Methodology

The report draws on information held in files at the Interpol General Secretariat (Interpol), from Interpol Member States, trade bodies, manufacturers and rights holders, and a range of open sources.

In this context the links between IPC and terrorist financing can be categorised as follows:

- *Direct links* where the group is implicated in the production, distribution or sale of counterfeit goods and remits a significant proportion of those funds for the activities of the group. Terrorist organizations with direct links include groups who resemble or behave more like organized criminal groups than traditional terrorist organizations. This is the case in Northern Ireland where paramilitary groups are engaged in crime activities. These crime activities include IPC. Involvement by these groups ranges from control or investment in manufacturing or fabrication to taxing market stalls where counterfeit goods are sold. It is possible for illicit profit to be generated for terrorist groups at different points in the process.
- *Indirect links* where sympathizers or militants are involved in IPC and knowingly remit some of the funds to terrorist groups via third parties. Terrorist organizations whose sympathizers are involved in IPC and who use some of the funds generated from this activity to support the terrorist group are included in this category. In many cases the funding is indirect, involving unrecorded movements of cash via third parties. This seems to be the case with some groups like Hizbullah and radical fundamentalist groups.

Specific Examples

In July 2003 Interpol concluded that the link between organized crime and counterfeit goods was well established and sounded the alarm that IPC was becoming the preferred method of funding for a number of terrorist groups. Developments since then have reinforced this view and the following example illustrates how these activities continue to be a cause for concern.

Lebanon

The Lebanon case is linked to Hizbullah and involves Bulgaria, China, Dubai, Germany, Lebanon and Turkey.

In October 2003 two containers were examined in Beirut Harbour after discrepancies were found in the documentation. While it appeared the place of origin was China and the containers had been shipped from Turkey, the goods were apparently made in Germany. The containers were found to contain counterfeit brake pads and shock absorbers purportedly manufactured by a German automobile manufacturer. Shortly after, a truck carrying another container and originating from Dubai was

examined in Lebanon. It was found to contain counterfeit brake pads and filters purportedly manufactured by the same German automobile company. The equivalent retail value of genuine parts in these two consignments would have been around 1,000,000 Euro.

With the assistance of the Lebanese law enforcement authorities enquiries revealed that the persons responsible for the consignments had business connections in Bulgaria, China, Dubai and Turkey and travelled widely. They had access to a warehouse in Lebanon from which it was suspected distribution of these and similar counterfeit products would be organized. The warehouse was located in an area influenced by Hizbullah. The suspects in this case are known to the International Criminal Police Organization and are believed to have links with Hizbullah and other Middle Eastern terrorist groups.

Other Examples

In July 2003 the The Interpol General Secretariat provided the following examples of IPC and terrorist financing.

Northern Ireland

In Northern Ireland the counterfeit products market is estimated to cost the economy in excess of US\$167 million. In 2002, the police seized in excess of US\$11 million in counterfeit products. It is known that paramilitary groups are involved in IPC, including counterfeit cigarette trafficking. It is unknown how much of the money generated by these counterfeiting operations goes to terrorist groups and how much is retained as criminal profit.

Paramilitary involvement in IPC in Northern Ireland is through their control of the markets where many counterfeit goods are sold. Other aspects of the IPC in Northern Ireland appear to have no terrorist involvement i.e. the importation and sale of counterfeit clothing is dominated by individuals in the South Asian community in Northern Ireland.

Chechen Separatists

Interpol is aware of a case in 2000 in Russia, where Chechen organized crime groups and terrorist organizations were benefiting from counterfeit good manufacturing and trafficking. In 2000, a joint operation between Russian law enforcement agencies and private industry resulted in the break-up of a CD manufacturing plant. According to the police officials involved this counterfeit CD plant was a source of financing for Chechen separatists. The CD plant was run by Chechen criminals who then remitted funds to Chechen rebels. The average monthly earnings of organization are estimated to have been US\$500,000–700,000. A number of explosives and arms were also confiscated by the police during raids on the residences of the suspects.

North African Radical Fundamentalists in Europe

Interpol possesses information that indicates the following in relation to IPC and terrorist financing in Europe in respect of radical fundamentalist networks. Sympathizers and militants of these groups may engage in a range of criminal activities including IPC and credit card fraud. Sympathizers will indirectly pass a portion of the funds generated from their illicit activity to radical fundamentalist networks. The sympathizer passes money in the form of charitable giving or zakat via Mosques, Imans or non-profit organizations who are sympathetic to radical fundamentalist causes. The money is eventually moved to the relevant radical fundamentalist group. These transactions are predominantly cash-based leaving no paper trail or way of verifying the origin or final destination of the funds.

In terms of radical fundamentalist militants, these persons may for long periods of time not be directly involved in terrorist activity. During these periods they support themselves through criminal activity like IPC or credit card fraud. A portion of the money earned in these activities is kept while a portion is remitted to radical fundamentalist terrorist groups in cash form, in ways similar to the methods used by sympathizers.

A militant active in Europe, known for his activities in radical fundamentalist organizations over the last decade has recently been convicted for trafficking in counterfeit goods. The individual's counterfeiting associates are also known members of radical fundamentalist groups. They are reported as still being involved in large-scale counterfeit goods trafficking. This individual fits the above profile of militants involved in criminal activity to support themselves while not actually on active service duty. Funds are remitted to the group to which they are aligned.

Al-Qaeda

Typically al-Qaeda and affiliated groups benefit from funds raised by sympathizers. This includes funds originating in either licit or illicit activities. One estimate is that over a ten year period al-Qaeda received between \$300 million and \$500 million, averaging US\$30 to US\$50 million a year. According to the same source approximately 10% of spending went on operations while 90% was used to maintain the infrastructure of the network, including payments to other groups to support them or to increase al-Qaeda's influence in a particular region. For example, the payment of money to guarantee the protection of the group in Afghanistan or Sudan.

One counterfeiting case has been reported in the media where there are connections to al-Qaeda. IPSP has had contact with investigating agencies in relation to this case. The investigation into a shipment of fake goods from Dubai to Copenhagen, Denmark, suggests that al-Qaeda may have indirectly obtained financing through counterfeit goods. Danish customs intercepted a container, containing counterfeit shampoos, creams, cologne and perfume. The sender of the counterfeit goods is allegedly a member of al-Qaeda. A transnational investigation involved agencies from three countries; Denmark, the United Kingdom and the United States. It is difficult to know whether the funds from this traffic went directly to al-Qaeda or whether only a part of them were remitted. In general, it is possible that funds generated through IPC are remitted to al-Qaeda indirectly through zakat-based (a religious duty to give money). Although given the cash-based nature of this giving it is difficult to establish the provenance of the funds.

Hizbullah

Interpol is aware of three cases of IPC related activity and terrorist funding in South America. These cases involve ethnic Lebanese who are involved in the remittance of funds to Hizbullah. As in the case of European radical fundamentalist groups, funds are thought to be indirectly remitted via organizations associated with Hizbullah. Interpol's information suggests that these persons are involved in the distribution and sale of counterfeit goods, not in the manufacturing or fabrication of counterfeit goods. It is suspected that most counterfeit manufacturing and fabrication is dominated by organized crime. Three examples illustrate this:

Funds generated from IPC may be remitted to Hizbullah using the following modus operandi. Counterfeit goods produced in Europe are sent to a free-trade zone in South America by a group of Lebanese criminals sympathetic to Hizbullah. The goods are then smuggled into a third country, to avoid import duties, where they are sold via a network of Palestinians. An unknown amount of the money generated through this activity is suspected to be remitted to Hizbullah.

In February 2000, an individual was arrested for piracy and suspected fundraising for Hizbullah. The individual sold pirated music CDs, Sega, Sony and Nintendo game discs to fund a Hizbullah related organization. Among the discs recovered were discs containing images and short films of the terrorist attacks and interviews with suicide bombers. The discs were allegedly used as propaganda to generate funds for Hizbullah. Interpol is in possession of some of these films. This individual is currently a fugitive.

Another individual was arrested for his alleged ties with the Hizbullah in Foz do Iguazú in June 2002 after evading arrest in October 2001. The individual is wanted for tax evasion and the collection and remittance of funds to extremist organizations. Interpol files do not mention involvement in IPC. The IPC connection is stated in open sources. Law enforcement sources indicate that numerous letters from organizations, suspected of being associated with Hizbullah in Lebanon, were found thanking the individual for financial contributions.

Conclusions Presented to the House Committee on International Relations

On 16th July 2003 Interpol presented nine conclusions based on the limited amount of information available from General Secretariat criminal files and Interpol member countries on IPC and terrorist financing. Based on the available information it was possible and remains valid to state with a reasonable degree of certainty the following:

1. IPC is global in its scale and scope, generating significant amounts of illicit profit.
2. IPC is a low risk/high return activity, due to the low penalties if caught, and the high return in relation to the initial investment.

3. IPC is now dominated by criminal organizations, due to the relatively low level of risk and comparatively high level of profit.
4. IPC, as with other crime activities, involves a number of different types of criminal actors from individuals to organized criminal groups.
5. It is generally true that terrorist groups have multiple sources of funding. These sources of funding include both licit and illicit activities. One illicit activity could be revenue generated from IPC. This can be from either direct involvement in IPC, or indirect involvement where supporters or sympathizers involved in IPC remit funds from this activity to terrorist groups.
6. In general most terrorist groups do not take responsibility for the development and control of counterfeit production and distribution; rather they benefit indirectly from funds remitted to them from sympathizers and militants involved in IPC.
7. It is not possible to estimate the level of funds remitted to terrorist groups from IPC. First, terrorist financing is by its nature opaque. Second, the scale and scope of intellectual property crime is difficult to realistically estimate as the number of cases known to Interpol is limited.
8. It is, however, possible to state with certainty that terrorist groups in Northern Ireland have financially benefited from IPC. Individuals in the Tri-border region in South America have remitted funds generated from IPC to associated Hizbollah organizations. Funds generated from the informal economy, specifically IPC related activities may also find their way indirectly to terrorist organizations.
9. It is possible to state that intellectual property theft is likely to become a more important source of financing for terrorist groups because it is low risk/high return. This is probably more true for terrorist groups like those in Northern Ireland due to the increasing resemblance of these groups to organized crime groups.

Developments since July 2003

Increased Law Enforcement Focus on Links Between Intellectual Property Crime and Terrorist Funding

More police forces are placing greater emphasis on the links between IPC and terrorist funding by dedicating resources to these investigations. The efforts of the Organised Crime Task Force in Northern Ireland are well documented.

Another example is the Anti-Terrorism Section of the Police Judiciare in Paris. The Section has police officers dedicated to these investigations and they are examining the links between IPC and terrorist groups including Islamic Jihad and GIA, an Algerian Fundamentalist Group.

The International Criminal Police Organization—Interpol

The International Criminal Police Organization has recognized the importance of this issue and that Interpol itself is uniquely placed to provide leadership and coordinate international action against IPC. The following action has occurred.

Interpol Intellectual Property Crime Action Group

The work of the Interpol Intellectual Property Crime Action Group (IIPCAG) has been enhanced and developed. It includes a wide range of stakeholders from customs, police and private industry. Under the auspices of Interpol the Group continue to address the following IPC enforcement issues:

1. Encouraging Interpol's 181 member countries to identify a national law enforcement IPC central point of contact to facilitate the exchange of IPC related information.
2. Enhancing the exchange of information and intelligence on IPC between law enforcement agencies.
3. Enhancing and strengthening the operational contact network of private and public partners throughout Interpol's four regions—Africa, the Americas, Asia and Europe.
4. Maintaining and disseminating Interpol Intellectual Crime Best Practice Guide to law enforcement agencies.
5. Developing and delivering training for IPC investigations to law enforcement agencies.
6. Raising awareness of the issue of IPC and its link to terrorist organizations and serious organized crime.

Interpol Intellectual Property Crime Model

Interpol will establish an initial three-year private/public program of activities to tackle IPC. The initiative builds on the achievements of the Interpol Intellectual Property Crime Action Group and is based on a dedicated Interpol Intellectual Property Crime Unit at the General Secretariat. The Intellectual Property Crime Unit will be supported throughout Interpol's 181 member countries by a network of dedicated Intellectual Property Crime liaison officers located in the four Interpol Regions.

The aim of the program is to develop and maintain a private/public IPC partnership to:

1. Develop strategies and programs to combat international criminal activity linked to intellectual property infringement.
2. Raise awareness of IPC and its links to terrorism and serious organized crime.
3. Facilitate and improve the exchange of information and intelligence on IPC.
4. Coordinate international multi-agency investigations into IPC.

Funding

The program will be funded by an IPC Fighting Fund established by Interpol to collect contributions from participants in the program. The fund has been established with an injection of funds by Interpol and the Netherlands *Korps landelijke politiediensten* (National Police Agency Support). The IPC Fighting Fund has been established on the reasonable expectation that costs will be shared. All the indications suggest contributions to supplement a substantial financial investment in these activities by Interpol will be forthcoming from private, government and other interested parties.

Benefits

The program is well on the way to becoming fully operational in the latter part of this year. A core number of IPC affected industries and cross-industry bodies will be invited to be founder members of the partnership and together with the global law enforcement community will derive the following operational benefits:

1. Interpol has strong communication channels with national law enforcement bodies and will encourage the effective prioritisation of IPC at a national level.
2. Interpol will assist national law enforcement bodies to identify appropriate IP rightsholders to facilitate the delivery of swift and effective enforcement action.
3. Evidence in recent investigations has increasingly established links between IP rights' violations and organized criminal groups, and terrorist groups who previously generated income by other forms of criminal activity including drug trafficking and money laundering. The increased involvement and focus of Interpol on these activities will ensure that the international law enforcement community effectively targets these highly efficient criminal and terrorist networks.
4. Groups who engage in IPC do not typically limit themselves to one form of product. A centralized point within Interpol for the gathering and dissemination of information about these groups will benefit all industries through more directed targeting. It will also lead to more interventions by law enforcement agencies.
5. The manufacture and distribution of goods which infringe IP rights is a global trade which does not recognise, and is certainly not restricted by, international boundaries. Through the involvement Interpol there will be increased opportunities to secure greater international cooperation and ensure that all levels of IPC activity receive an appropriate response.
6. Interpol will use Intelligence Analysts to examine IPC trends and patterns on a global basis. This method will deliver global IPC strategic assessments and provide significant advantages to national governments, law enforcement agencies and the private sector.

Conclusion

The link between organized crime groups and counterfeit goods is well established. There is now an increasing body of evidence to indicate IPC is also linked to terrorist groups and their fund raising activities.

The international dimension of this threat demands a collective global partnership response and the Interpol Intellectual Property Crime Model is a vehicle for achieving this objective.

Senator NELSON. And I might quote from that report, page 4, “We think further work needs to be done to trace the proceeds and to establish the links with groups benefitting from these funds.” This, right here, Interpol is telling us, “Watch out.” This is going to be a major source of financing for terrorist organizations.

Now, this isn’t the pirating of your intellectual property, but it is the pirating of somebody else’s intellectual property, and if it can be done there, it can be done with your intellectual property. So talk to us about this.

Mr. VALENTI. Well, we have had reports—our anti-piracy people—and we have constabularies in 60 countries in the world—and we have had reports that we have not personally investigated because we don’t have the resources to do it, but that the international police forces say that, not only in counterfeit goods, Senator, but in movies and in music, it is a low-risk, high-reward business where you don’t get killed and you don’t get arrested, and if you are arrested, you’re fined \$20 and you’re on your way in 24 hours to resume your business. So it is a ripe, rich, fat target for people to deal with. And it stands to reason if there’s something criminal that can be done with low risk and high reward, criminals will do it for all sorts of illicit reasons.

Senator NELSON. You look at the penalties of the drug trade, and then, as you just suggested, Mr. Valenti, the penalties for dealing with counterfeit goods. There’s no comparison. So the risk is very low. So if they can make so much more anyway on knock-off items or on your property, and the risk to them is very low, where’s the terrorist going to go to get their financing?

Mr. Bainwol?

Mr. BAINWOL. I think you answered that question. But let me just make one other specific reference. In Pakistan, there are about eight pirate CD factories. We understand that two of them are principally funded by a terrorist cell. So there are links that are being established, and the simply proposition that the zero-product cost makes it a pretty attractive thing to do, in the context of minimal risk, is hard to argue against.

Senator NELSON. Mr. Lowenstein?

Mr. LOWENSTEIN. Well, there’s really not much to add. I mean, I think that much of the information that we—that my testimony was based on came from the Interpol report. We don’t have the same vast far-flung investigative networks that either the motion-picture or the recording industry have, so we’re actually very grateful for some of the work that they do in this area that helps inform us, as well.

I can tell you, after 9/11, there were anecdotal stories, in the Washington Post and elsewhere, about video-game pirates in Paraguay who were very much in business and supporting terrorist operations, supporting the al Qaeda operations. Again, that’s not something we independently verified, but the reports are out there. And, you know, where there’s smoke, there’s usually fire.

Senator NELSON. It’s food for thought, Mr. Chairman, as we try to tackle this. I have a daughter that is a recording artist. And, of

course, I've seen this from her standpoint and as a violation of her rights. But now this issue is getting so much bigger. This is now involving national security, so we're going to have to address this, Mr. Chairman.

Thank you.

The CHAIRMAN. Well, thank you very much, Senator Nelson. I thank all Senators for their participation.

We especially thank our witnesses. Your initial papers were very important and will be a matter of record and available to our other members and our colleagues. And the dialogue and question-and-answer we've had, I think, has been helpful in terms of illuminating for us some action that we must take.

We thank you again, and the hearing is adjourned.

[Whereupon, at 11:20 a.m., the hearing was adjourned.]

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